



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 139276

TO: Jeffrey Parkin
Location: rem/3d39/3c18
Art Unit: 1648
Friday, December 03, 2004

Case Serial Number: 10/031975

From: Toby Port
Location: Biotech-Chem Library
REM-1A59
Phone: 571-272-2523

toby.port@uspto.gov

Search Notes

Examiner Parkin,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Toby Port

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From: Parkin, Jeffrey
Sent: Wednesday, December 01, 2004 5:22 PM
To: STIC-Biotech/ChemLib
Subject: Sequence Search for U.S. Serial No. 10/031,975

Would you please search the following SEQ ID NOS.: vis-à-vis the aforementioned application: 1, 2, 12, 23, and 24.

- Specifically, I am interested in the following amino acids: 176-221, 179-218, and 179-214.

Can you perform a search on just these fragments? I am not particularly interested in the full-length sequences, since these are already known and publicly available.

Place results on both PAPER and DISK.

Any questions or suggestions on search strategies please call.

JSP

AU 1648
REM 3D39
2-0908

STIC
660-2 2005
12-01-04

<http://expoweb1.8001/cgi-bin/expo/GenInfo/snquery.pl?APPL_ID=10031975>

STAFF USE ONLY

Searcher: _____
Searcher Phone: 2-_____
Date Searcher Picked up: _____
Date Completed: _____
Searcher Prep/Rev. Time: _____
Online Time: _____

Type of Search

NA Sequence: # _____
AA Sequence :# _____
Structure: # _____
Bibliographic: _____
Litigation: _____
Patent Family: _____
Other: _____

Vendors and cost where applicable

STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other(Specify): _____

THIS PAGE ON FILE (1887)

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221
Perfect score: 244
Sequence: 1 SNQNNFVHDCVNITIKQHTV.....ENFTETDVKMERVVEQNCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:.*
1: geneseqp1980s:.*
2: geneseqp1990s:.*
3: geneseqp2000s:.*
4: geneseqp2001s:.*
5: geneseqp2002s:.*
6: geneseqp2003as:.*
7: geneseqp2003bs:.*
8: geneseqp2004s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	244	100.0	117	5	ABG94357 Modified
2	244	100.0	117	5	ABG80669 Human prl
3	244	100.0	117	7	ADD24196 Modified
4	244	100.0	142	2	AAW17686 Priton pro
5	244	100.0	163	7	ADB63859 Human pro
6	244	100.0	200	5	ABG31907 Human prl
7	244	100.0	208	3	ABO7318 Human prl
8	244	100.0	208	3	ABG1902 Human prl
9	244	100.0	208	5	ABG1902 Human prl
10	244	100.0	245	4	AAW72342 Monkey pr
11	244	100.0	245	4	AAW72342 Cercopit
12	244	100.0	253	2	AAW6715 Human prl
13	244	100.0	253	2	AAW6960 Human prl
14	244	100.0	253	2	AAW85901 Human prl
15	244	100.0	253	2	AAW07994 Human prl
16	244	100.0	253	3	AAW81485 Human prl
17	244	100.0	253	3	AAW06272 Human prl
18	244	100.0	253	3	AAW15035 Human prl
19	244	100.0	253	4	AAW72347 Priton pro
20	244	100.0	253	4	AAW72353 Guesera p
21	244	100.0	253	4	AAW72344 Guesera mo
22	244	100.0	253	4	AAW72351 Hamadryas
23	244	100.0	253	4	AAW72348 Priton pro
24	244	100.0	253	4	AAW72346 Priton pro
25	244	100.0	253	4	AAW72355 Priton pro

26	244	100.0	253	4	AAW72349 Priton pro
27	244	100.0	253	4	AAW72340 Orangutan
28	244	100.0	253	4	AAW72338 Human prl
29	244	100.0	253	4	AAW72354 Capuchin
30	244	100.0	253	4	AAW72341 Gorilla p
31	244	100.0	253	4	AAW61770 Human prl
32	244	100.0	253	4	AAW82112 Human prl
33	244	100.0	253	4	AAW65853 Human prl
34	244	100.0	253	5	ABP51787 Human prl
35	244	100.0	253	5	ABG31901 Human prl
36	244	100.0	253	5	ABW04426 Human prl
37	244	100.0	253	5	AAW15603 Human prl
38	244	100.0	253	5	ABW78009 Amino aci
39	244	100.0	253	5	ABG7181 Prostate
40	244	100.0	253	6	ABW58868 Human prl
41	244	100.0	253	6	AAW33227 Human prl
42	244	100.0	253	6	ABW42800 Human prl
43	244	100.0	253	6	ABW42789 Human prl
44	244	100.0	253	6	ABW42790 Gorilla p
45	244	100.0	253	7	ADD24186 Human prl

ALIGNMENTS

RESULT 1
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN MO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WC-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326898P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Sebbel P;
PI Ploeseek C;
XX
DR WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441p; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organism comprising
XX at least one first attachment site, where the organism is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with the antigen
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide attachment site
 CC scaffold interaction through at least one non-peptide attachment site
 CC repeatable interaction through the association to form an ordered and
 CC capable of forming a capid which comprises a coat protein
 CC having an amino acid sequence selected from five amino acid sequences
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC Sequence 117 AA;

Query Match Best Local Similarity 100.0%; Score 244; DB 5; Length 117;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVVKMERVVEQWCI 46
 DB 49 SNONNFVHDCVNTTKKHTVTTTGGNFETDVVKMERVVEQWCI 94

RESULT 2
 ID ABG80669 standard; protein; 117 AA.
 AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Human prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW graft versus host disease; Abeta 1-42; influenza; mutant;
 KW adult respiratory distress syndrome; AIDS; Crohn's disease; anaphylaxis;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; immunoblastic lymphadenopathy;
 KW angioimmunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 XX enterokinase; cysteine-containing linker.
 OS Homo sapiens.
 XX Synthetic.
 XX WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0286849P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOWEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P., Lechner F., Ortmann R., Lubowend R., Staufenbiel M., Frey P.

PI Renner WA, Bachmann M, Tisot A, Sebbel P, Plossek C;
 XX WPI; 2002-636514/68.
 XX
 PR Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (11) an organism or organismic determinant; (1) a
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through the antigen or antigenic determinant and the scaffold interact
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, inflammatory immune diseases, myasthenia
 CC systemic lupus erythematosus, non-Hodgkin's lymphoma, Grave's disease,
 CC graft, immunoproliferative disease lymphadenopathy, immunoblastic
 CC angioimmunoproliferative disease lymphadenopathy, immunoblastic
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is a modified
 CC containing N- or C-terminal linker peptide and a Cysteine-
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

Sequence 117 AA;
 SQ
 Query Match Best Local Similarity 100.0%; Score 244; DB 5; Length 117;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVVKMERVVEQWCI 46
 DB 49 SNONNFVHDCVNTTKKHTVTTTGGNFETDVVKMERVVEQWCI 94

RESULT 3
 ID ADD24196 standard; protein; 117 AA.
 AC ADD24196;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE Modified human prion protein amino acid sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; bovine spongiform encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mutein.
 OS Synthetic.
 XX prion.
 XX
 PN WO2003059386-A2

PD 24-JUL-2003;
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bechmann M, Maurer P, Pelliccioli B, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 CC
 SQ Sequence 117 AA;

 Query Match 100.0%; Score 244; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVVEQWCI 46
 ||||||||||||||||||||||||||||||||||||||||||||||||
 DB 49 SNQNNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVVEQWCI 94

 RESULT 4
 AAW17686
 ID AAW17686 standard; peptide; 142 AA.
 XX
 AC AAW17686;
 XX
 DT 14-JAN-1998 (first entry)
 XX
 DE Prion protein peptide Hu 90-231.
 XX
 DE Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 KM
 XX Homo sapiens.
 OS
 XX
 PN WO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96WO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (BEGC) UNIV CALIFORNIA.
 XX

PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11; Page 7-38; 50pp; English.
 CC
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 SQ Sequence 142 AA;

 Query Match 100.0%; Score 244; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 6.7e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVVEQWCI 46
 ||||||||||||||||||||||||||||||||||||||||||||||||
 DB 81 SNQNNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVVEQWCI 126

 RESULT 5
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTR020055570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumor.
 KM
 OS Homo sapiens.
 XX
 PN EPI308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PE 28-MAR-2002; 2002EP-00007401.
 XX
 PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Isegai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isego Y, Hio Y, Otsuka K, Nagai K, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 DR WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 PS Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel

CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or peptide
 CC with the antibody of the polynucleotide by contacting the polypeptide or peptide
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotide, or as a probe
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the encoded protein to treat diseases. The
 CC specific data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.

XX Sequence 163 AA;

Query Match Best Local Similarity 100.0%; Score 244; DB 7; Length 163;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 SNQNNFVHDCVNTIKQHTVTTTGGNFTETDVKMERVVEQWCI 46
 Db 80 SNQNNFVHDCVNTIKQHTVTTTGGNFTETDVKMERVVEQWCI 125

RESULT 6
 ABG31907

ID ABG31907 standard; protein; 200 AA.

AC ABG31907;

DT 05-NOV-2002 (first entry)

XX Human prion protein related peptide #6.

KM Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX WO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.

PS Example 2; Page 63-64; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)

CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention

XX Sequence 200 AA;

Query Match Best Local Similarity 100.0%; Score 244; DB 5; Length 200;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 SNQNNFVHDCVNTIKQHTVTTTGGNFTETDVKMERVVEQWCI 46
 Db 140 SNQNNFVHDCVNTIKQHTVTTTGGNFTETDVKMERVVEQWCI 185

RESULT 7

AB07318
 XX AAB07318 standard; protein; 208 AA.

AC AAB07318;

DT 17-OCT-2000 (first entry)

XX Human prion protein sequence.

KM Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX Homo sapiens.

OS Key Location/Qualifiers

FT Region 29..69

FT Disulfide-bond repeat unit: PHGGGWGQ (AAB07318)

FT Modified-site 208

FT /note= "C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

XX WO200029850-A1.

PD 25-MAY-2000.

PF 27-OCT-1999; 99WO-FI000897.

PR 17-NOV-1998; 98FI-00002481.

PA (WALL-) WALLAC OY.

PA (BBSR-) BBSRC OFFICE.

PI Hope J, Barnard GR, Birkett CR,

DR WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.

PS Disclosure; Page 43-44; 50pp; English.

CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal, cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of transmissible
 CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
 CC and Gerstmann-Strausler-Sheinker syndrome (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the process resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

Query Match 100.0%; Score 244; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
DB 148 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 193

RESULT 8
AAB07329

ID AAB07329 standard; protein; 208 AA.

XX AAB07329;

DT 17-OCT-2000 (first entry)

XX Human prion protein sequence.

XX Human; prion protein; transmissible spongiform encephalopathy;

KM bovine spongiform encephalopathy; TSE diagnosis; PrP.

XX Homo sapiens.

XX Key Location/Qualifiers

FT Region 29..69 /note="Repeat region consisting of tandem repeats of

FT Disulfide-bond 157..192 repeat unit: PHGGWGQ (AAB07319)";

FT Modified-site 208 /note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)";

XX WO200029849-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99WO-FI000896.

XX 17-NOV-1998; 98FI-00002480.

XX (WALL-) WALLAC OY.

XX (BBSR-) BBSRC OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPI; 2000-39978/34.

XX New immunoassay for prion protein, used for determination of
transmissible spongiform encephalopathies in mammals, comprises specific
capture antibody.

XX Disclosure; Page 43-44; 50pp; English.

XX The present sequence is the human prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of transmissible
XX spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

Query Match 100.0%; Score 244; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
DB 148 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 193

RESULT 9
ABG31902

ID ABG31902 standard; protein; 208 AA.

XX ABG31902;

DT 05-NOV-2002 (first entry)

XX Human prion protein related protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection;
KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

XX Homo sapiens.

XX WO200261418-A1.

XX 08-AUG-2002.

XX 31-JAN-2002; 2002WO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

XX Kitamoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
PT prion protein sedimentation in non-human follicular dendritic cells as
PT indication, applicable in safety test on e.g. drugs and cosmetics.

XX Disclosure; Page 49-50; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention

XX Sequence 208 AA;

Query Match 100.0%; Score 244; DB 5; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
DB 148 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 193

RESULT 10
AAB72342

ID AAB72342 standard; peptide; 245 AA.

XX AAB72342;

XX 06-AUG-2003 (revised)

XX 17-MAY-2001 (first entry)

XX (REGC) UNIV CALIFORNIA.
 XX Prusiner SB, Scott MR, Telling G;
 XX WPI, 1996-010868/01.
 XX
 XX Chimeric prion protein gene - for formation of a transgenic animal
 PT susceptible to prion infection by prion(s) normally specific for a
 PT different species.
 XX
 PS Disclosure; Page 41-42; 65pp; English.
 XX
 XX Pathogenic prions in a sample can be detected by injecting the sample to
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric
 CC PrP gene in which the gene includes a portion of a gene of the animal
 CC (e.g. human) in danger of infection from prions in the sample. Preferred
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment
 CC of the mouse PrP, MoPrP, is replaced with the corresponding human PrP
 CC sequence. The chimeric PrP, designated Mhu2MPR, differs from the MoPrP
 CC by 9 AA between residues 96 and 167
 XX
 XX Sequence 253 AA:
 SO
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 46
 DB 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 215
 RESULT 13
 ID AAM69660 standard; protein; 253 AA.
 XX
 AC AAM69660;
 XX
 DT 25-MAR-2003 (revised)
 DT 19-OCT-1998 (first entry)
 XX
 DE Human prion protein HuPrP.
 XX
 XX Human; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease.
 XX
 OS Homo sapiens.
 XX
 PN US5792901-A.
 XX
 PD 11-AUG-1998.
 XX
 PE 30-JUL-1996; 96US-00692892.
 XX
 PR 13-MAY-1994; 94US-00242188.
 PR 31-JUL-1995; 95US-00509261.
 PR 31-AUG-1995; 95US-00521392.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Scott MR, Telling GC, Prusiner SB;
 XX
 DR WPI, 1998-456207/39.
 XX
 XX Transgenic mouse with altered PrP gene - for detecting disease-causing
 PT prions.
 PS
 XX Example 8; Fig 3; 37pp; English.
 CC A transgenic mouse has been developed which comprises a genome in which
 CC both alleles of an endogenous PrP (prion protein) gene of the mouse are
 CC ablated, the genome containing operatively inserted all exogenous non-

CC mouse PrP gene. The mouse is susceptible to infection with prions which
 CC generally only infect a genetically diverse mammal due to the presence of
 CC the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
 CC symptoms of prion disease within 200 days or less after inoculation with
 CC prions which generally only infect a genetically diverse mammal. Also
 CC described in the present invention are: (A) a method of producing the
 CC transgenic mouse; and (B) determining the presence of infectious prions
 CC in a sample obtained from a bovine. The transgenic mouse is used to
 CC detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
 CC disease of humans caused by prions. The present sequence represents human
 CC prion protein (HuPrP), used in an example from the present invention.
 CC (updated on 25-MAR-2003 to correct PF field.)
 XX
 XX Sequence 253 AA:
 SO
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 46
 DB 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETDVKKMERVVEQMC1 215
 RESULT 14
 ID AAM85901 standard; peptide; 253 AA.
 XX
 AC AAM85901;
 XX
 DT 12-FEB-1999 (first entry)
 XX
 DE Human prion protein (PrP) sequence.
 XX
 XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
 KM Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
 KM cosmetic; therapeutic; human.
 XX
 OS Homo sapiens.
 XX
 PN US5846533-A.
 XX
 PD 08-DEC-1998.
 XX
 PE 13-SEP-1996; 96US-00713939.
 XX
 PR 14-SEP-1995; 95US-00528104.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI (SCRI) SCRIPPS RES INST.
 XX
 PI Prusiner SB, Williamson RA, Burton DR;
 XX
 DR WPI, 1999-058996/05.
 XX
 XX Antibody specific for scrapie isoform of prion protein - useful for
 PT diagnosis and therapy.
 PS
 XX Disclosure; Col 41-42; 58pp; English.
 CC This represents a human prion protein (PrP) sequence. The invention
 CC relates to an antibody that is capable of binding to native PrP(Sc), the
 CC scrapie isoform of PrP. The antibody is produced by a method that
 CC comprises synthesizing a library of antibodies on phages, contacting the
 CC phages with a composition containing PrP protein, isolating phages that
 CC bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
 CC and optionally analysing the phages to determine a nucleic acid sequence
 CC encoding an amino acid sequence to which the native PrP(Sc) binds. The
 CC antibody is used to detect disease-associated PrP, especially in
 CC Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
 CC can also be used to neutralise the infectivity of PrP(Sc). Assays using
 CC the antibodies can be used to screen for disease-associated PrP in
 CC pharmaceutical products, foods and cosmetics or for therapeutic purposes

XX Sequence 253 AA;

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC I 46
170 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC I 215

RESULT 15

AA07994
ID AA07994 standard; protein; 253 AA.
AC AA07994;

DT 08-JUL-1999 (first entry)

DE Human prion protein.

KM Prion protein; PrP, human; polyclonal antiserum; immunosassay; detection;
KN bovine; murine.

XX Homo sapiens.

PN DE1974543-A1.

PD 22-APR-1999.

PF 15-OCT-1997; 97DE-01045443.

PR 15-OCT-1997; 97DE-01045443.

PA (HERZ/) HERZOG-WESMER A.

PI Meamer AH, Kiselev OI, Scheller A;

DR WPI; 1999-255775/22.

PT Diagnostic polyclonal antiserum specific for prion protein - obtained by
immunisation with metal-containing polypeptide.

PS Claim 3; Fig 1; 12pp; German.

XX This invention describes a novel process for producing a polyclonal
antiserum against a human or animal prion protein (PrP) which can be used
in immunoassays for detecting PrP's. The method comprises (a) selecting a
polypeptide that has a length of at least 10 amino acids and has an amino
acid sequence at least 70% homologous to that of human, bovine or murine
PrP in a region of at least 10 consecutive amino acids (b) binding a
metal to the polypeptide by reaction with a metal compound and (c)
injecting the metal-containing polypeptide into a host animal, optionally
together with adjuvants, to induce production of a polyclonal antiserum
Sequence 253 AA;

Query Match

Best Local Similarity 100.0%; Score 244; DB 2; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC I 46
170 SNQNNFVHDCVNIITIKOHTVTTTGGENFTETDVKKMERVVEQMC I 215

Search completed: December 3, 2004, 00:55:35
Job time: 78.1639 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221

Perfect score: 244
Sequence: 1 SNQNFVHDCVNITIKQHTV.....ENFTEDVAMERVVEQMC1 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	244	100.0	241 2 S71048	major prion protei
2	244	100.0	241 2 S71056	major prion protei
3	244	100.0	245 2 S71045	major prion protei
4	244	100.0	253 1 U0HU	major prion protei
5	244	100.0	253 2 184423	major prion protei
6	244	100.0	253 2 S71055	major prion protei
7	244	100.0	253 2 137032	major prion protei
8	243	99.6	226 2 A33892	prion-related prot
9	243	99.6	252 2 161848	major prion protei
10	243	99.6	254 2 A23544	major prion protei
11	242	99.2	264 2 S37137	prion protein - gr
12	241	98.8	232 2 S71041	major prion protei
13	240	98.4	254 2 B34759	prion protein - go
14	240	98.4	254 2 A34759	prion protein - Ch
15	239	98.0	245 2 S53627	major prion protei
16	239	98.0	252 2 S53621	major prion protei
17	239	98.0	253 2 S53623	major prion protei
18	239	98.0	253 2 S53623	major prion protei
19	239	98.0	253 2 S53620	major prion protei
20	239	98.0	253 2 S53625	major prion protei
21	239	98.0	253 2 S53635	prion protein - si
22	239	98.0	253 2 S53644	major prion protei
23	239	98.0	253 2 161847	major prion protei
24	239	98.0	253 2 S53616	major prion protei
25	239	98.0	253 2 S53616	major prion protei
26	239	98.0	253 2 S53631	major prion protei
27	239	98.0	256 2 U0268	major prion protei
28	239	98.0	264 2 A54330	major prion protei
29	238	97.5	256 2 S57149	prion protein - go

30	238	97.5	256 2 A54281	major prion protei
31	238	97.5	260 2 S53629	major prion protei
32	236	96.7	252 2 S53634	major prion protei
33	235	96.3	239 2 S53633	major prion protei
34	235	96.3	257 2 UQ1900	major prion protei
35	234	95.9	253 2 S53617	major prion protei
36	233	95.5	252 2 JC6175	prion protein - ra
37	232	95.1	254 1 U0HYIH	major prion Pp-Sc
38	232	95.1	257 2 A23545	major prion Pp-Sc
39	77	31.6	267 2 A37372	prion protein homo
40	76	31.1	267 1 U0CH	major prion protei
41	76	31.1	273 2 A46280	prion protein - ch
42	61.5	25.2	533 1 D71338	probable ribose/ga
43	60.5	24.8	182 2 A10130	conserved hypotet
44	59	24.2	139 2 H90004	hypothetical prote
45	58.5	24.0	258 2 AF2524	hypothetical prote

ALIGNMENTS

RESULT 1
S71048
major prion protein - Calliobus moloch (fragment)
C:Species: Calliobus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71048; S53632
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g475585
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53614; MUID:95139066; PMID:7837269
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 1.4e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNFVHDCVNITIKQHTVTTTKGENTEDVAMERVVEQMC1 46
Db 163 SNQNFVHDCVNITIKQHTVTTTKGENTEDVAMERVVEQMC1 208

RESULT 2
S71056
major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71056; S53621
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g474364
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621

RESULT 5

major prion protein precursor - rhesus macaque
C/Species: Macaca mulatta (rhesus macaque)

C/Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004

C/Accession: 184423; S53622; S71054
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 184423

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PIDN:AAA68635.1; PID:G5958

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53622

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-210, 'R', 212-253 <SCH>

A/Cross-references: EMBL:U08307

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71054

A/Molecule type: DNA

A/Residues: 1-253 <SCW>

A/Cross-references: EMBL:U08307; NID:G474372; PIDN:AAC50095.1; PID:G474373

A/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 170 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQWCI 215

RESULT 6

S71055

major prion protein - pig-tailed macaque

C/Species: Macaca nemestrina (pig-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71055; S53626

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71055

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AAC50094.1; PID:G4743

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53626

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-210, 'R', 212-247 <SCW>

A/Cross-references: EMBL:U08306

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQWCI 46
Db 170 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQWCI 215

RESULT 7

major prion protein precursor - gorilla

C/Species: Gorilla gorilla (gorilla)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 137032

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 137032

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:G563208; PIDN:AAA68633.1; PID:G56320

C/Superfamily: major prion protein

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 170 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQWCI 215

RESULT 8

prion-related protein - rat (fragment)

C/Species: Rattus norvegicus (Norway rat)

C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A/Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; MUID:88037055; PMID:2889848

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LTA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C/Superfamily: major prion protein

Query Match 99.6%; Score 243; DB 2; Length 226;

Best Local Similarity 97.8%; Pred. No. 1.7e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 142 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQWCI 187

RESULT 9

I61848

major prion protein precursor - common squirrel monkey

C/Species: Saimiri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 161848

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 161848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G595852; PIDN:AAA68636.1; PID:G59585

C/Superfamily: major prion protein

Query Match
Best Local Similarity 99.6%; Score 243; DB 2; Length 252;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db
1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
169 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 214

RESULT 10
A23544

Major prion protein precursor - mouse
N/Alternate names: PrP, Scrapie prion
C/Species: Mus musculus (house mouse)
C/Date: 22-Jul-1987 #sequence
R/Accession: A23544; A23544; S02521; A22315
R/Accession: A23544; A23544; S02521; A22315
C/Title: Distinct prion proteins in short and long scrapie incubation period mice.
A/Reference number: A23544; PMID:88052869; PMID:2890436
A/Accession: A23544
A/Molecule type: DNA
A/Residues: 1-254 <MES>
A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA3997.1; PID:G200529
A/Note: Experimental source: strains NZM and I/LmJ
R/Location: C. J. Chesebro, B. J. Race, R. J. Kelly, J. M. Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986
A/Reference number: A23544; PMID:86313583; PMID:3462700
A/Accession: A23544
A/Molecule type: mRNA
A/Residues: 1-254 <LOC>
R/Hope, J. J. Multhaup, G. J. Reekie, L. J. D. Kimberlin, R. H. J. Beyreuther, K.
A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain
A/Reference number: S02521; PMID:8816695; PMID:2894984
A/Accession: S02521
A/Molecule type: protein
A/Residues: 1-254 <HOP>
R/Chesebro, B. J. Race, R. J. Kelly, K. J. Nishio, J. J. Bloom, M. J. Lechner, D. J. Bergstrom, S. J.
A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u
A/Accession: A22315; PMID:85213844; PMID:3923361
A/Molecule type: mRNA
A/Residues: 87-132, V, 134-164 <CHE>
C/Superfamily: major prion protein
C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
F/232-231/Domain: signal sequence #status predicted <Sig>
F/232-234/Domain: major prion protein #status predicted <Sig>
F/178-213/Disulfide bonds: carboxyl-terminal propylidene #status predicted <MAT>
F/180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted <CTP>
F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match
Best Local Similarity 99.6%; Score 243; DB 2; Length 254;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db
1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
169 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 214

RESULT 11
S37137
Prion protein - greater kudu
C/Species: Tragelaphus streptoceros (greater kudu)
C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
R/Martin, T. C. J. Hughes, S. L. J. Hughes, K. J. Dawson, M.
submitted to the EMBL Data Library, August 1993

A/Reference number: S37137
A/Accession: S37137
A/Status: Preliminary
A/Molecule type: DNA
A/Residues: 1-264 <MAP>
C/Superfamily: major prion protein

Query Match
Best Local Similarity 99.2%; Score 242; DB 2; Length 264;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db
1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
161 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 226

RESULT 12
S71041

Major prion protein - black-handed spider monkey (fragment)
C/Species: Ateles geoffroyi (black-handed spider monkey)
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
R/Schaezel, H. M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-232 <SCH>
A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G4743376; PIDN:AAC50097.1; PID:G47
R/Schaezel, H. M.; da Costa, M.; Taylor, L.; Cohen, F. E.; Prusiner, S. B.
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; PMID:95139066; PMID:7837269
A/Accession: S53614
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-194, R, 196-231 <SCH>
A/Cross-references: EMBL:U08309
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 98.8%; Score 241; DB 2; Length 232;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db
1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
154 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 199

RESULT 13
B34759
Prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
R/Jowanset, D. H.; Butler, D. A.; Westaway, D.; McKinley, M. P.; DeArmond, S. J.; Prusiner, S. B.
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; PMID:90158578; PMID:2406562
A/Accession: B34759
A/Status: Preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:G191182; PIDN:AAA37014.1; PID:G191183
C/Superfamily: major prion protein

Query Match
Best Local Similarity 98.4%; Score 240; DB 2; Length 254;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db
1 SNONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46

Db 170 NNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMMERVVEQMCV 215

RESULT 14

A34759
prion protein - Chinese hamster
C:/Species: Cricetus griseus (Chinese hamster)
C:/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C:/Accession: A34759
R:/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner
Mol. Cell. Biol. 10, 1153-1163, 1990
A:/Title: Three hamster species with different scrapie incubation times and neuropatholog
A:/Reference number: A34759; MUID:90158578; PMID:2406562
A:/Accession: A34759
A:/Status: Preliminary
A:/Molecule type: DNA
A:/Residues: 1-254 <IOM>
A:/Cross-references: UNIPROT:Q60506; GB:M33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C:/Superfamily: major prion protein

Query Match 98.4%; Score 240; DB 2; Length 254;
Best Local Similarity 95.7%; Pred. No. 4.5e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMMERVVEQMCV 46
:|||||
Db 170 NNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMMERVVEQMCV 215

RESULT 15

S53627
major prion protein - green monkey
C:/Species: Cercopithecus aethiops (green monkey, grivet)
C:/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:/Accession: S53627; S71043
R:/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:/Title: Prion protein gene variation among primates.
A:/Reference number: S53614; MUID:95139066; PMID:7837269
A:/Accession: S53627
A:/Status: nucleic acid sequence not shown
A:/Molecule type: DNA
A:/Residues: 1-245 <SCH>
A:/Cross-references: UNIPROT:P40250; EMBL:U08291
R:/Schaeztl, H.M.
submitted to the EMBL Data Library, April 1994
A:/Reference number: S71041
A:/Accession: S71043
A:/Molecule type: DNA
A:/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:/Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
C:/Superfamily: major prion protein
C:/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 239; DB 2; Length 245;
Best Local Similarity 97.8%; Pred. No. 5.8e-22;
Matches 45; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMMERVVEQMCV 46
:|||||
Db 162 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMMERVVEQMCV 207

Search completed: December 3, 2004, 00:38:37
Job time : 14.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221
Perfect score: 244
Sequence: 1 SNONNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQMCI 46

Scoring table: BL0SUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Uniprot_02:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	238	1	PRIO_CERAT
2	244	100.0	238	1	PRIO_THEGE
3	244	100.0	238	2	O86XR1
4	244	100.0	241	1	PRIO_CALMO
5	244	100.0	241	1	PRIO_MANSP
6	244	100.0	245	1	PRIO_CERAE
7	244	100.0	246	1	PRIO_CERNO
8	244	100.0	246	1	PRIO_CERNE
9	244	100.0	246	1	PRIO_CERPO
10	244	100.0	246	1	PRIO_ERYPY
11	244	100.0	246	2	AA083636
12	244	100.0	252	1	PRIO_CERBP
13	244	100.0	253	1	PRIO_COLCU
14	244	100.0	253	1	PRIO_GORGO
15	244	100.0	253	1	PRIO_HUMAN
16	244	100.0	253	1	PRIO_MACPA
17	244	100.0	253	1	PRIO_PONPY
18	244	100.0	253	1	PRIO_PRRER
19	244	100.0	253	2	O6FGR8
20	244	100.0	253	2	O6JL99
21	244	100.0	253	2	AA880162
22	244	100.0	253	2	AA812192
23	244	100.0	277	2	O6SES1
24	244	100.0	277	2	AA821603
25	244	100.0	285	2	O7S942
26	243	99.6	248	2	O866V6
27	243	99.6	253	2	O9Z0T5
28	243	99.6	254	1	PRIO_MOUSE
29	243	99.6	254	1	PRIO_RAT
30	243	99.6	254	2	O8VHV6
31	243	99.6	254	2	AA019993

ALIGNMENTS

32	243	99.6	260	1	PRIO_SAIISC	P40258 saimiri sci
33	242	99.2	220	2	O866W7	O866W7 ochotona pr
34	242	99.2	226	2	O97907	O97907 gazella sub
35	242	99.2	227	2	O97909	O97909 tragalaphus
36	242	99.2	256	1	PRP1_TRAST	P40243 tragalaphus
37	242	99.2	264	1	PRP1_TRAST	P40242 tragalaphus
38	241	98.8	232	1	PRIO_ATEGE	P40246 atelaphus geof
39	241	98.8	252	1	PRIO_CALJA	P40247 callithrix
40	240	98.4	239	1	PRIO_AOTTR	P40245 aotus trivi
41	240	98.4	240	2	O8VHV4	O8VHV4 microtus ag
42	240	98.4	248	2	O8VHV5	O8VHV5 clethrionom
43	240	98.4	254	1	PRIO_CRIGR	O60506 cricetus
44	240	98.4	254	1	PRIO_CRIMI	O60468 cricetus
45	240	98.4	254	1	PRIO_SIGHI	O9Z0L3 sigmodon hi

RESULT 1
ID PRIO_CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
RN NCBI_TaxID=36222, 9546;
RX [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL: U75384; AAB50623.1; -;
CC EMBL: U75382; AAB50629.1; -;
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; Prion.
CC PROSITE: PS00291; Prion; 1.
CC PROSITE: PS00706; Prion; 2.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON TER 1 1
CC SIGNAL <1 15 By similarity.
CC CHAIN 16 215 Major prion protein.

FT PROPEP 216 238 Removed in mature form (By similarity).
 FT LIPID 215 215 GPI-anchor amidated serine (By similarity).
 FT DISULFID 164 199 By similarity.
 FT CARBOHYD 166 182 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EB3531B CRC64;
 Query Match
 Best Local Similarity 100.0%; Score 244; DB 1; Length 238;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMC1 46
 Db 155 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMC1 200
 RESULT 2
 ID PRTIO THEGE STANDARD; PRT; 238 AA.
 AC Q95270;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP; Synonyms=PrP;
 OS Theriophilic; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Theriophilic.
 NCBI_Taxid=9606;
 RN
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudemir J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion.";
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells;
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the high quantity in the brain of humans and
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC EMBL; U75183; AAB50630.1; -
 DR HSRP; P23907; I004.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 Signal.

FT NON_TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 215 Major prion protein.
 FT PROPEP 216 >238 Removed in mature form (By similarity).
 FT DISULFID 164 199 By similarity.
 FT LIPID 215 215 GPI-anchor amidated serine (By similarity).
 FT CARBOHYD 166 182 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 83 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF60243EDB CRC64;
 Query Match
 Best Local Similarity 100.0%; Score 244; DB 1; Length 238;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMC1 46
 Db 155 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMC1 200
 RESULT 3
 ID Q86XR1 PRELIMINARY; PRT; 238 AA.
 AC Q86XR1;
 DT 01-JUN-2003 (TrEMBLrel. 24, Created)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last sequence update)
 DT 01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PRNP;
 OS Homo sapiens (Human).
 OC Mammalia; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Eukaryota; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NCBI_Taxid=9606;
 RN
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AY219882; AAB083635.1; -
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 1 1
 SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBB CRC64;
 Query Match
 Best Local Similarity 100.0%; Score 244; DB 2; Length 238;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMC1 46
 Db 155 SNONNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQMC1 200
 RESULT 4
 ID PRTIO CALMO STANDARD; PRT; 241 AA.
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)

DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Callipebus moloch (Dusky titi).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
 OC Callipebus.
 OC NCBI_Taxid=9523;
 RN (1)
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U08312; AAC50100.1; -.
 CC PIR: S71048; S71048.
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC PRINTS: PR00341; Prion.
 CC PROSITE: PS00291; Prion octapep; 6.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 CC Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 >241
 CC FT DISULFID 172 207
 CC FT LIPID 223 223
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC FT NON TER 241 241
 CC SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVQMERVVEQWCI 46
 Db 163 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVQMERVVEQWCI 208
 RESULT 5

PRIO MANSP STANDARD; PRT; 241 AA.
 ID PRIO MANSP
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandrillus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Mandrillus.
 OC NCBI_Taxid=9561;
 RN (1)
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U08303; AAC50091.1; -.
 CC PIR: S71056; S71056.
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC PRINTS: PR00341; Prion.
 CC PROSITE: PS00291; Prion 1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 >241
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC FT NON TER 241 241
 CC SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVQMERVVEQWCI 46

Db 163 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVWQMC1 208

```

RESULT 6
PRTIO_CERAB STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 03-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euleleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534, 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08291; AAC50080.1; -
DR BMBL; U08292; AAC50081.1; -
DR PIR; S53627; S53627.
DR PIR; S71045; S71045.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT CHAIN 1 22
FT SIGNAL 23 22
FT PROPEP 223 245
FT LIPID 222 222
FT DISULFID 171 206
FT CARBOHYD 173 173
FT CARBOHYD 189 189
FT DOMAIN 51 83
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT REPEAT 83 83
SQ SEQUENCE 245 AA; 26885 MW; D582B58B2726C99A CRC64;

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Query Match
Best Local Similarity 100.0%; Score 244; DB 1; Length 245;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVWQMC1 46
Db 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVWQMC1 207
RESULT 7
PRTIO_CERMO STANDARD; PRT; 246 AA.
AC P61761; O95172; O95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 03-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euleleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U75386; AAB50625.1; -
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT CHAIN 1 15
FT SIGNAL 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
SQ SEQUENCE 246 AA; 26885 MW; D582B58B2726C99A CRC64;

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FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 244; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFTEFDVKMERVVEQMCI 46
Db 163 SNQNNFVHDCVNITIKQHTVTTTGGKGFTEFDVKMERVVEQMCI 208

RESULT 8
PRIO CERNE STANDARD; PRT; 246 AA.
ID PRIO CERNE 095172; 095173;
AC P61762; 095172; 095173;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (De Brazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL: U75387; AAB50626.1; -.
CC HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; Prion.
DR PROSITE: PS00291; Prion octapep; 6.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON TER 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT 1.

FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 244; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 SNQNNFVHDCVNITIKQHTVTTTGGKGFTEFDVKMERVVEQMCI 46
Db 163 SNQNNFVHDCVNITIKQHTVTTTGGKGFTEFDVKMERVVEQMCI 208

RESULT 9
PRIO CERTO STANDARD; PRT; 246 AA.
ID PRIO CERTO 095176;
AC P61762; 095176;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (De Brazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL: U75385; AAB50628.1; -.
CC HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; Prion octapep; 6.
DR PROSITE: PS00291; Prion octapep; 6.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON TER 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT 1.

FT DOMAIN 44 84 S X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 Q.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 FT REPEAT 84 84 5.
 SQ SEQUENCE 246 AA; 26914 MW; F58679CBBC5AD07 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 208

RESULT 10
 ID_PRIO_ERYPA STANDARD; PRT; 246 AA.
 AC Q95174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DE 05-JUL-2004 (Rel. 44, Last annotation update)
 GN Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 OS Erythrocytes patas (Red guenon) (Cercopithecus patas).
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Cercopitheciinae; Primates; Catarrhini; Cercopithecidae;
 OK NCBI_Taxid=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "folds".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U7388; AAB50627.1; -
 DR HSP; P23907; IG04.
 DR Interpro; IPR000817; Prion.
 DR Pfam; PF03991; Prion.1.
 DR PRINTS; PR00391; Prion.
 DR PROSITE; PS00391; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT
 By similarity.
 Major prion protein.
 Removed in mature form (By similarity).
 GPI-anchor amidated serine (By similarity).

FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
 FT DOMAIN 44 84 S X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 Q.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 FT REPEAT 84 84 5.
 SQ SEQUENCE 246 AA; 26884 MW; D35D105BEC5108 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 208

RESULT 11
 ID_AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TrEMBLrel. 27, Created)
 DT 02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
 DE Prion protein (Fragment).
 GN Prnp.
 OS Homo sapiens (Human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OK NCBI_Taxid=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/Genbank/DBJ databases.
 DR EMBL; AY219883; AAO83636.1; -
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 SQ SEQUENCE 246 AA; 26884 MW; 309B1B3C8841566 CRC64;
 Query Match 100.0%; Score 244; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
 Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 208

RESULT 12
 ID_PRIO_CEBAP STANDARD; PRT; 252 AA.
 AC P40249;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DE 05-JUL-2004 (Rel. 44, Last annotation update)
 GN Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
 OS Cebus apella (Brown-capped capuchin).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
 OK NCBI_Taxid=9515;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA MEDLINE=95139066; PubMed=7837269;
 RT "Prion protein gene variation among primates".
 J. Mol. Biol. 245:362-374(1995).

```

CC CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC CC host genome and is expressed both in normal and infected cells.
CC CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC CC "rods".
CC CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC CC animals infected with the degenerative neurological diseases kuru,
CC CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC CC transmissible mink encephalopathy (TME), etc.
CC CC -1- SIMILARITY: Belongs to the prion family.
CC CC -----
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CC CC or send an email to license@isb-sib.ch).
CC CC -----
CC CC EMBL: U08295; AAC50084.1; -.
CC CC PR: S53631; S53631.
CC CC HSSP: P23907; IG04.
CC CC InterPro: IPR000817; Prion.
CC CC Pfam: PF00377; Prion; 1.
CC CC Pfam: PF03991; Prion; octapep; 6.
CC CC PRINTS: PR00341; PRION.
CC CC PROSITE: PS00291; PRION_1; 1.
CC CC PROSITE: PS00706; PRION_2; 1.
CC CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC CC FT SIGNAL 1 22 By similarity.
CC CC FT CHAIN 23 229 Major prion protein.
CC CC FT PROPEP 230 252 Removed in mature form (By similarity).
CC CC FT LIPID 229 229 GPI-anchor amidated serine (By
CC CC similarity).
CC CC FT DISUFID 178 213 By similarity.
CC CC FT CARBOHYD 180 180 N-linked (GlcNAc... ) (Potential).
CC CC FT CARBOHYD 196 196 N-linked (GlcNAc... ) (Potential).
CC CC FT DOMAIN 51 90 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC CC FT REPEAT 51 58 0.
CC CC FT REPEAT 51 58 1.
CC CC FT REPEAT 59 66 2.
CC CC FT REPEAT 67 74 3.
CC CC FT REPEAT 75 82 4.
CC CC FT REPEAT 83 90 5.
CC CC FT SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;
CC CC -----
CC CC Query Match 100.0%; Score 244; DB 1; Length 252;
CC CC Best Local Similarity 100.0%; Pred. No. 1.6e-22;
CC CC Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
RN [2]
RP SEQUENCE OF 8-253 FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hamitoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ database.
CC CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC CC host genome and is expressed both in normal and infected cells.
CC CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC CC "rods".
CC CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC CC animals infected with the degenerative neurological diseases kuru,
CC CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC CC transmissible mink encephalopathy (TME), etc.
CC CC -1- SIMILARITY: Belongs to the prion family.
CC CC -----
CC CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC CC or send an email to license@isb-sib.ch).
CC CC -----
CC CC EMBL: U08297; AAC50086.1; -.
CC CC EMBL: U75389; AAB50624.1; -.
CC CC PR: S53618; S53618.
CC CC HSSP: P23907; IG04.
CC CC InterPro: IPR000817; Prion.
CC CC Pfam: PF00377; Prion; 1.
CC CC Pfam: PF03991; Prion; octapep; 6.
CC CC PRINTS: PR00341; PRION.
CC CC PROSITE: PS00291; PRION_1; 1.
CC CC PROSITE: PS00706; PRION_2; 1.
CC CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC CC FT SIGNAL 1 22 By similarity.
CC CC FT CHAIN 23 230 Major prion protein.
CC CC FT PROPEP 231 253 Removed in mature form (By similarity).
CC CC FT LIPID 230 230 GPI-anchor amidated serine (By
CC CC similarity).
CC CC FT DISUFID 179 214 By similarity.
CC CC FT CARBOHYD 181 181 N-linked (GlcNAc... ) (Potential).
CC CC FT CARBOHYD 197 197 N-linked (GlcNAc... ) (Potential).
CC CC FT DOMAIN 51 91 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC CC FT REPEAT 51 59 0.
CC CC FT REPEAT 51 59 1.
CC CC FT REPEAT 60 67 2.
CC CC FT REPEAT 68 75 3.
CC CC FT REPEAT 76 83 4.
CC CC FT REPEAT 84 91 5.
CC CC FT SEQUENCE 253 AA; 27626 MW; 14B17477881F5316 CRC64;
CC CC -----
CC CC Query Match 100.0%; Score 244; DB 1; Length 253;
CC CC Best Local Similarity 100.0%; Pred. No. 1.6e-22;
CC CC Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN Name=PrNP;
 OS Gorilla gorilla gorilla (Lowland gorilla).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Gorilla.
 OK NCBI_TaxId=9595;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Pustiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 RP SEQUENCE FROM N.A.
 RC TISSUE=Blood;
 RX MEDLINE=95083661; PubMed=7991600;
 RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,
 RT Rubenstein R., Dubnick W., Gibbs C.J., Gajdusek D.C.;
 RL "Infectious amyloid precursor gene sequences in primates used for
 experimental transmission of human spongiform encephalopathy.";
 CC Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation
 CC at the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; U08300; AAC50089.1; -
 DR EMBL; U15166; AAA6633.1; -
 DR PIR; I37032; I37032.1; -
 DR PIR; S53614; S53614.1; -
 DR HSP; P04156; I14M.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PR03991; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR GlycoProtein; GPI-anchor; 1.
 FT CHAIN 1 22 By similarity; Prion; Repeat; Signal.
 FT PROPEP 23 230 Major prion protein.
 FT LIPID 231 253 Removed in mature form (By similarity).
 FT LIPID 230 230 GPI-anchor amidated serine (By similarity).
 FT DISULFID 179 214 By similarity.
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 51 91 S x 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 51 59 Q.
 FT REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 FT REPEAT 76 83 3.
 FT REPEAT 84 91 4.
 FT REPEAT 91 91 5.
 FT CONFICT 6 C -> Y (in Ref. 2).
 SQ SEQUENCE 253 AA; 27660 MW; E28F4CGRABBC49S CRC64;
 Query Match Best Local Similarity 100.0%; Score 244; DB 1; Length 253;
 Pred. No. 1.ee-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHCNVITIKQHTVTTTGTGNETFDVKKMERVEMQCT 46
 DB 170 SNONNFVHCNVITIKQHTVTTTGTGNETFDVKKMERVEMQCT 215
 RESULT 15
 ID PRIO HUMAN STANDARD; PRT; 253 AA.
 AC P04156; O60489; P78446; Q15216; Q15221; Q8TBG0; Q96E70; Q9UP19;
 DT 01-NOV-1986 (Rel. 03, Created)
 DT 01-NOV-1986 (Rel. 03, Last sequence update)
 DE 01-OCT-2004 (Rel. 45, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (ASCR)
 DE (CD230 antigen).
 CN Name=PrNP;
 OS Homo sapiens (human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
 OK NCBI_TaxId=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=86300093; PubMed=3755672;
 RA Kretschmar H.A., Stowring L.E., Westaway D., Stubblebine W.H.,
 RA Pustiner S.B., Deamond S.J.;
 RT "Molecular cloning of a human prion protein cDNA.";
 RL DNA 5:315-324(1986).
 RN [2]
 RP SEQUENCE FROM N.A., AND VARIANT 56-GLY-GLY-63 DEL.
 RC TISSUE=Brain;
 RX MEDLINE=91328137; PubMed=1678248;
 RA Puckett C., Concannon P., Casey C., Hood L.;
 RT "Genomic structure of the human prion protein gene.";
 RL Am. J. Hum. Genet. 49:320-329(1991).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99018115; PubMed=9799790;
 RA Lee I.Y., Westaway D., Smit A.P.A., Wang K., Sato J., Chen L.,
 RA Acharya C., Ankener M., Baskin D., Cooper C., Yao H., Pustiner S.B.,
 RA Hood L.E.;
 RT "Complete genomic sequence and analysis of the prion protein gene
 RT region from three mammalian species.";
 RL Genome Res. 8:1022-1037(1998).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Prostate;
 RA Hyrb D.J., Reynolds T.A., Nakhla A.M., Kahn S.M., Khan S.M.,
 RA Roman N.A., Roemer W.;
 RT "Cloning of human prostate prion protein cDNA.";
 RL Submitted (Sep-2000) to the EMBL/Genbank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21638749; PubMed=11780052; DOI=10.1038/41485a;
 RA Deloukas P., Matthews L.H., Ashurst J.L., Burton J., Gilbert J.G.R.,
 RA Jones M., Steward K.F., Almeida J.P., Babbage A.K., Bagguley C.L.,
 RA Bailey J., Barlow K.P., Bates K.N., Beard L.M., Beare D.M.,
 RA Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,
 RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
 RA Chigusa S., Cowley V.E., Collier R.E., Connor R.E., Corry N.R.,
 RA Coulson A.G., Cowile G.J., Deadman R., Dhand P.D., Dunn M.,
 RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
 RA Grafham D.V., Griffiths C., Griffiths M.N.D., Guilliam R., Hall R.E.,
 RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
 RA Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D.,
 RA Kay M.P., Kimberley A.M., King A., Knights K., Laidlaw G.K., Lawlor S.,
 RA Lehar V.L., Martin S.L., Martin S.L., McComachie L.J., McElroy J.D.,
 RA Marsh V.L., Martin S.L., Martin S.L., McComachie L.J., McElroy J.D.,
 RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
 RA Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,
 RA Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H.,
 RA Rice C.M., Ross M.T., Scott C.B., Senra H.K., Showkhen R., Sims S.,

RA Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
 RA Swann R.M., Symamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
 RA Tracay A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,
 RA Whitehead S.L., Whitaker P., Willey D.L., Williams L., Williams S.A.,
 RA Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
 RA Rogers J.,
 RT "The DNA sequence and comparative analysis of human chromosome 20."
 RL Nature 414:865-871(2001).
 [6]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain, and Ovary;
 RX MEDLINE=23288257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Hsieh N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max I., Wang J., Hsieh F.,
 RA Diatchenko L., Marusik K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Uebli T.B., Toshiyuki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mulhany S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hultk S.W.,
 RA Villalón D.K., Murty D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahy J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whitting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butlerfield Y.S.N., Krzywinski M.I., Skalska U., Smalins D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences."
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 [7]
 RP SEQUENCE OF 8-253 FROM N.A.
 RX MEDLINE=86261778; PubMed=3014653;
 RA Liao Y.-C.J., Lebo R.V., Clawson G.A., Smuckler E.A.;
 RT "Human prion protein cDNA: molecular cloning, chromosomal mapping, and
 RT biological implications."
 RL Science 233:364-367(1986).
 [8]
 RP SEQUENCE OF 9-222 FROM N.A., AND VARIANT 56-GLY-63 DEL.
 RC TISSUE=Brain;
 RX MEDLINE=93250789; PubMed=1363802;
 RA Emory C.R., Sung J.H., Haase A.T.;
 RT "Mutation in the prion protein gene in a demented patient."
 RL Hum. Mol. Genet. 1:443-444(1992).
 [9]
 RP SEQUENCE OF 41-85 FROM N.A., AND VARIANT 56-GLY-63 DEL.
 RX MEDLINE=96090306; PubMed=7485229;
 RA Perry R.T., Go R.C., Harrell L.E., Acton R.T.;
 RT "SSCP analysis and sequencing of the human prion protein gene (PRNP)
 RT detects two different 24 bp deletions in an atypical Alzheimer's
 RT disease family."
 RL Am. J. Med. Genet. 60:12-18(1995).
 [10]
 RP SEQUENCE OF 58-85 AND 111-150.
 RX MEDLINE=91160504; PubMed=1672107;
 RA Tagliavini F., Prelli F., Ghiso J., Bugiani O., Serban D.,
 RA Prusiner S.B., Farlow M.R., Ghetti B., Frangione B.;
 RT "Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana
 RT kindred) is an 11 kd fragment of prion protein with an N-terminal
 RT glycine at codon 58."
 RL EMBO J. 10:513-519(1991).
 [11]
 RP SEQUENCE OF 84-91 FROM N.A.
 RX MEDLINE=92073400; PubMed=1683708;
 RA Goldfarb L.G., Brown P., McCombie W.R., Goldgaber D., Swergold G.D.,
 RA Mills P.R., Cervenakova L., Baron H., Gibbs C.J. Jr., Gajdusek D.C.;
 RT "Transmissible familial Creutzfeldt-Jakob disease associated with
 RT five, seven, and eight extra octapeptide coding repeats in the PRNP
 RT gene."
 RL Proc. Natl. Acad. Sci. U.S.A. 88:10926-10930(1991).

RN [12]
 RP STRUCTURE BY NMR OF 23-230.
 RX MEDLINE=20087216; PubMed=10618385;
 RA Zahn R., Liu A., Luhrs T., Riek R., von Schroetter C.,
 RA Lopez Garcia F., Billeter M., Calzolari L., Wider G., Wüthrich K.;
 RT "NMR solution structure of the human prion protein."
 RL Proc. Natl. Acad. Sci. U.S.A. 97:145-150(2000).
 [13]
 RP STRUCTURE BY NMR OF 118-221.
 RX MEDLINE=20359708; PubMed=10900000;
 RA Calzolari L., Lysek D.A., Guntert P., von Schroetter C., Riek R.,
 RA Zahn R., Wüthrich K.;
 RT "NMR structures of three single-residue variants of the human prion
 RT protein."
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).
 [14]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=93372867; PubMed=8364585;
 RA Palmer M.S., Collinge J.;
 RT "Mutations and polymorphisms in the prion protein gene."
 RL Hum. Mutat. 2:168-173(1993).
 [15]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=94029646; PubMed=8105771;
 RA Prusiner S.B.;
 RT "Genetic and infectious prion diseases."
 RL Arch. Neurol. 50:1129-1153(1993).
 [16]
 RP VARIANTS GSD LEU-102.
 RX MEDLINE=89159432; PubMed=2564168;
 RA Hsiao K., Baker H.F., Crow T.J., Poulter M., Owen F.,
 RA Terry-Liger J.D., Westaway D., Ott J., Prusiner S.B.;
 RT "Linkage of a prion protein missense variant to Gerstmann-Strausler
 RT syndrome."
 RL Nature 338:342-345(1989).
 [17]
 RP VARIANTS LEU-102; VAL-117 AND VAL-129.
 RX MEDLINE=89392018; PubMed=2783132;
 RA Doh-Ura K., Tateishi J., Sasaki H., Kitamoto T., Sakaki Y.;
 RT "Pro-->Leu change at position 102 of prion protein is the most common
 RT but not the sole mutation related to Gerstmann-Strausler syndrome."
 RL Biochem. Biophys. Res. Commun. 163:974-979(1989).
 [18]
 RP VARIANTS PFI ASN-178.
 RX MEDLINE=92195483; PubMed=1347910;
 RA Medori R., Montagna P., Tritschler H.J., LeBlanc A., Cortelli P.,
 RA Timpner P., Lugaresi E., Gambetti P.;
 RT "Fatal familial insomnia: a second kindred with mutation of prion
 RT protein gene at codon 178."
 RL Neurology 42:669-670(1992).
 [19]
 RP VARIANTS CJD ASN-178.
 RX MEDLINE=91124933; PubMed=1671440;
 RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Kovanan J.,
 RA McCombie W.R., Trepp S., Gajdusek D.C.;
 RT "New mutation in scrapie amyloid precursor gene (at codon 178) in
 RT Finnish Creutzfeldt-Jakob kindred."
 RL Lancet 337:425-425(1991).
 [20]
 RP VARIANTS CJD LYS-200.
 RX MEDLINE=90355709; PubMed=1975028;
 RA Goldfarb L., Mitrova E., Brown P., Toh B.K., Gajdusek D.C.;
 RT "Mutation in codon 200 of scrapie amyloid protein gene in two clusters
 RT RT gene."

Query Match 100.0%; Score 244; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1,6e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNTIKQHTVTTTGGNFFETDVOMERVVEQNCI 46
 Db 170 SNQNNFVHDCVNTIKQHTVTTTGGNFFETDVOMERVVEQNCI 215

Fri Dec 3 10:53:54 2004

Search completed: December 3, 2004, 00:35:27
Job time : 76.3541 secg

us-10-031-975-1_copy_176_221.rup

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221

Perfect score: 244
Sequence: 1 SNQNNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQNCI 46Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:*

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- 2: /cgn2_6/prodata/1/1aa/5B.COMB.pep.*
- 3: /cgn2_6/prodata/1/1aa/6A.COMB.pep.*
- 4: /cgn2_6/prodata/1/1aa/6B.COMB.pep.*
- 5: /cgn2_6/prodata/1/1aa/PCTUS.COMB.pep.*
- 6: /cgn2_6/prodata/1/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	DB ID	Description
1	244	100.0	142 1 US-08-556-823-10	Sequence 10, Appl
2	244	100.0	245 4 US-09-431-887-5	Sequence 5, Appl
3	244	100.0	245 4 US-09-431-887-15	Sequence 15, Appl
4	244	100.0	252 4 US-09-431-887-17	Sequence 17, Appl
5	244	100.0	253 1 US-08-242-188-2	Sequence 2, Appl
6	244	100.0	253 1 US-08-509-261A-2	Sequence 2, Appl
7	244	100.0	253 1 US-08-660-626-8	Sequence 8, Appl
8	244	100.0	253 1 US-08-692-892-2	Sequence 2, Appl
9	244	100.0	253 2 US-08-713-939A-2	Sequence 2, Appl
10	244	100.0	253 2 US-08-868-162A-22	Sequence 22, Appl
11	244	100.0	253 3 US-09-031-168-8	Sequence 8, Appl
12	244	100.0	253 3 US-09-128-450-20	Sequence 20, Appl
13	244	100.0	253 3 US-09-036-579-2	Sequence 2, Appl
14	244	100.0	253 3 US-09-823-494-20	Sequence 20, Appl
15	244	100.0	253 3 US-09-550-374-2	Sequence 2, Appl
16	244	100.0	253 4 US-09-431-887-1	Sequence 1, Appl
17	244	100.0	253 4 US-09-431-887-3	Sequence 3, Appl
18	244	100.0	253 4 US-09-431-887-4	Sequence 4, Appl
19	244	100.0	253 4 US-09-431-887-7	Sequence 7, Appl
20	244	100.0	253 4 US-09-431-887-9	Sequence 9, Appl
21	244	100.0	253 4 US-09-431-887-10	Sequence 10, Appl
22	244	100.0	253 4 US-09-431-887-11	Sequence 11, Appl
23	244	100.0	253 4 US-09-431-887-12	Sequence 12, Appl
24	244	100.0	253 4 US-09-431-887-14	Sequence 14, Appl
25	244	100.0	253 4 US-09-431-887-16	Sequence 16, Appl
26	244	100.0	253 4 US-09-431-887-18	Sequence 18, Appl
27	244	100.0	253 4 US-09-943-906-2	Sequence 2, Appl

28	244	100.0	253 4 US-09-669-516C-8	Sequence 8, Appl
29	244	100.0	253 4 US-09-919-172-57	Sequence 57, Appl
30	244	100.0	253 4 US-09-976-594-72	Sequence 72, Appl
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33	243	99.6	254 1 US-08-509-261A-1	Sequence 1, Appl
34	243	99.6	254 1 US-08-660-626-7	Sequence 7, Appl
35	243	99.6	254 1 US-08-692-892-1	Sequence 1, Appl
36	243	99.6	254 2 US-08-713-939A-1	Sequence 1, Appl
37	243	99.6	254 2 US-08-868-162A-21	Sequence 21, Appl
38	243	99.6	254 3 US-09-031-168-7	Sequence 7, Appl
39	243	99.6	254 3 US-09-128-450-19	Sequence 19, Appl
40	243	99.6	254 3 US-09-128-450-28	Sequence 28, Appl
41	243	99.6	254 3 US-09-036-579-1	Sequence 1, Appl
42	243	99.6	254 3 US-09-823-494-19	Sequence 19, Appl
43	243	99.6	254 3 US-09-823-494-28	Sequence 28, Appl
44	243	99.6	254 3 US-09-550-374-1	Sequence 1, Appl
45	243	99.6	254 4 US-09-431-887-20	Sequence 20, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
APPLICANT: Fred E. Cohen
TITLE OF INVENTION: Formation and use of prion protein
TITLE OF INVENTION: Formation and use of prion protein
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
FAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 244; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 6, 1e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFTEDVKMERVVEQNCI 46
DB 81 SNQNNFVHDCVNITIKQHTVTTTGGNFTEDVKMERVVEQNCI 126

RESULT 2

US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 162 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 3

US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match
Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 162 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 4

US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 252;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 169 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 214

RESULT 5

US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bosicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188
; FILING DATE: 13-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Bosicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/014001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 854-5277
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 253 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match
Best Local Similarity 100.0%; Score 244; DB 1; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 170 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 6

US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-2
Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 SNQNNFVHDCVNTIKQHTVTTTKGNTFTETDVKKMERVVEQMC1 46
Db 170 SNQNNFVHDCVNTIKQHTVTTTKGNTFTETDVKKMERVVEQMC1 215
RESULT 7
US-08-660-626-8
Sequence 8, Application US/0860626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Fred E. Cohen
APPLICANT: Glenn C. Telling
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPILOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asclii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8
Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 SNQNNFVHDCVNTIKQHTVTTTKGNTFTETDVKKMERVVEQMC1 46
Db 170 SNQNNFVHDCVNTIKQHTVTTTKGNTFTETDVKKMERVVEQMC1 215
RESULT 8
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match
Best Local Similarity 100.0%; Score 244; DB 1; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 SNQNNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQMC 46
DB 170 SNQNNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQMC 215

RESULT 9
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match
Best Local Similarity 100.0%; Score 244; DB 2; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 SNQNNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQMC 46
DB 170 SNQNNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQMC 215
RESULT 10

US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match
Best Local Similarity 100.0%; Score 244; DB 2; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 SNQNNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQMC 46
DB 170 SNQNNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQMC 215

RESULT 11
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 12
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 621149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 13
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Boricevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TEXT:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 14
US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29

SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 20
 LENGTH: 253
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-823-494-20

Query Match
 Best Local Similarity 100.0%; Score 244; DB 3; Length 253;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKOHTVTTTGGNFETDVKKMERVVEOMCI 46
 DB 170 SNQNNFVHDCVNIITIKOHTVTTTGGNFETDVKKMERVVEOMCI 215

RESULT 15
 US-09-550-374-2
 Sequence 2, Application US/09550374
 Patent No. 6372214
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Williamson, R. Anthony
 TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
 NUMBER OF SEQUENCES: 86
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson P.C.
 STREET: 2200 Sand Hill Road
 CITY: Menlo Park
 STATE: CA
 COUNTRY: U.S.A.
 ZIP: 94025
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FASTSEQ Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/550,374
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/036,579
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Bozicewic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 06510/059001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-854-5277
 TELEFAX: 415-854-0875
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: Single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-09-550-374-2

Query Match
 Best Local Similarity 100.0%; Score 244; DB 3; Length 253;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNIITIKOHTVTTTGGNFETDVKKMERVVEOMCI 46
 DB 170 SNQNNFVHDCVNIITIKOHTVTTTGGNFETDVKKMERVVEOMCI 215

Search completed: December 3, 2004, 00:18:54
 Job time: 18.4197 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-1_COPY_176_221

Perfect score: 244
Sequence: 1 SNQNFVHDCVNITKQHTV.....ENFTETDYKMERVVEQNCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-Processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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18: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
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20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
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2	244	100.0	117	14	US-10-050-898-348
3	244	100.0	117	14	US-10-346-190-89
4	244	100.0	141	16	US-10-612-356A-1
5	244	100.0	162	9	US-09-745-003-10
6	244	100.0	163	14	US-10-104-047-2013
7	244	100.0	200	16	US-10-470-848-10
8	244	100.0	208	16	US-10-470-848-3
9	244	100.0	208	17	US-10-745-393-1
10	244	100.0	245	14	US-10-304-630-5
11	244	100.0	245	14	US-10-304-630-15
12	244	100.0	252	14	US-10-304-630-17
13	244	100.0	253	9	US-09-823-494-20

14	244	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
15	244	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
16	244	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
17	244	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
18	244	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
19	244	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
20	244	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
21	244	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
22	244	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
23	244	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
24	244	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
25	244	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
26	244	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
27	244	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
28	244	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
29	244	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
30	244	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
31	244	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
32	244	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1
33	244	100.0	253	14	US-10-435-602-2	Sequence 2, Appl1
34	244	100.0	253	15	US-10-301-448-21	Sequence 21, Appl1
35	244	100.0	253	15	US-10-301-448-22	Sequence 22, Appl1
36	244	100.0	253	15	US-10-301-448-32	Sequence 32, Appl1
37	244	100.0	253	16	US-10-648-593-151	Sequence 151, Appl1
38	244	100.0	253	16	US-10-470-848-2	Sequence 2, Appl1
39	244	100.0	253	16	US-10-772-656-54	Sequence 54, Appl1
40	244	100.0	592	17	US-10-745-393-3	Sequence 3, Appl1
41	243	99.6	124	14	US-10-050-902-324	Sequence 324, Appl1
42	243	99.6	124	14	US-10-050-898-324	Sequence 324, Appl1
43	243	99.6	124	14	US-10-346-190-93	Sequence 93, Appl1
44	243	99.6	164	9	US-09-745-003-12	Sequence 12, Appl1
45	243	99.6	209	16	US-10-470-848-6	Sequence 6, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
GENERAL INFORMATION:
Publication No. US20030175290A1
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 49 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luord, Rainer
APPLICANT: Staufenbiel, Matthias
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 49 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellisio, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
PRIOR FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/336,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 49 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 4

US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 244; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.1e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
Db 81 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 126

RESULT 5

US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PRP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 244; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.2e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
 Db 79 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 124

RESULT 6

US-10-104-047-2013
 ; Sequence 2013, Application US/10104047
 ; Publication No. US20030236392A1
 ; GENERAL INFORMATION:
 ; APPLICANT: HELIX RESEARCH INSTITUTE
 ; TITLE OF INVENTION: No. US20030236392A1 full length cDNA
 ; FILE REFERENCE: HI-A0105
 ; CURRENT APPLICATION NUMBER: US/10/104,047
 ; CURRENT FILING DATE: 2002-03-25
 ; PRIOR APPLICATION NUMBER:
 ; PRIOR FILING DATE:
 ; NUMBER OF SEQ ID NOS: 4096
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2013
 ; LENGTH: 163
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-104-047-2013

Query Match 100.0%; Score 244; DB 14; Length 163;
 Best Local Similarity 100.0%; Pred. No. 7.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
 Db 80 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 125

RESULT 7

US-10-470-848-10
 ; Sequence 10, Application US/10470848
 ; Publication No. US20040137421A1
 ; GENERAL INFORMATION:
 ; APPLICANT: President of Tohoku University
 ; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 ; FILE REFERENCE: PH-1224-PCT
 ; CURRENT APPLICATION NUMBER: US/10/470,848
 ; CURRENT FILING DATE: 2003-07-31
 ; PRIOR APPLICATION NUMBER: JP 2001-24279
 ; PRIOR FILING DATE: 2001-01-31
 ; NUMBER OF SEQ ID NOS: 10
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 10
 ; LENGTH: 200
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-470-848-10

Query Match 100.0%; Score 244; DB 16; Length 200;
 Best Local Similarity 100.0%; Pred. No. 9.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
 Db 140 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 185

RESULT 8

US-10-470-848-3
 ; Sequence 3, Application US/10470848
 ; Publication No. US20040137421A1
 ; GENERAL INFORMATION:
 ; APPLICANT: President of Tohoku University
 ; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 ; FILE REFERENCE: PH-1224-PCT
 ; CURRENT APPLICATION NUMBER: US/10/470,848

; CURRENT FILING DATE: 2003-07-31
 ; PRIOR APPLICATION NUMBER: JP 2001-24279
 ; PRIOR FILING DATE: 2001-01-31
 ; NUMBER OF SEQ ID NOS: 10
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 3
 ; LENGTH: 208
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-470-848-3

Query Match 100.0%; Score 244; DB 16; Length 208;
 Best Local Similarity 100.0%; Pred. No. 9.8e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
 Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 193

RESULT 9

US-10-745-393-1
 ; Sequence 1, Application US/10745393
 ; Publication No. US2004020311A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Faatz, Elke
 ; APPLICANT: Scholz, Christian
 ; APPLICANT: Stock, Werner
 ; APPLICANT: Schaarschmidt, Peter
 ; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
 ; FILE REFERENCE: 12290 US3 (9793/141)
 ; CURRENT APPLICATION NUMBER: US/10/745,393
 ; CURRENT FILING DATE: 2003-12-23
 ; PRIOR APPLICATION NUMBER: EP 0115225.3
 ; PRIOR FILING DATE: 2001-06-22
 ; PRIOR APPLICATION NUMBER: EP 01120939.2
 ; PRIOR FILING DATE: 2001-08-31
 ; PRIOR APPLICATION NUMBER: US 10/167,774
 ; PRIOR FILING DATE: 2002-06-10
 ; PRIOR APPLICATION NUMBER: US 10/179,905
 ; PRIOR FILING DATE: 2002-06-24
 ; NUMBER OF SEQ ID NOS: 3
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 1
 ; LENGTH: 208
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-745-393-1

Query Match 100.0%; Score 244; DB 17; Length 208;
 Best Local Similarity 100.0%; Pred. No. 9.8e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 46
 Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQWCI 193

RESULT 10

US-10-304-630-5
 ; Sequence 5, Application US/10304630
 ; Publication No. US20030161836A1
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/10/304,630
 ; CURRENT FILING DATE: 2002-11-26
 ; PRIOR APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 5
 LENGTH: 245
 TYPE: PRT
 ORGANISM: Cercopithecus aethiops
 US-10-304-630-5

Query Match
 Best Local Similarity 100.0%; Score 244; DB 14; Length 245;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 207

RESULT 11
 US-10-304-630-15
 Sequence 15, Application US/10304630
 Publication No. US20030161836A1
 GENERAL INFORMATION:
 APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/10/304,630
 PRIOR FILING DATE: 2002-11-26
 PRIOR APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 15
 LENGTH: 245
 TYPE: PRT
 ORGANISM: Cercopithecus diana
 US-10-304-630-15

Query Match
 Best Local Similarity 100.0%; Score 244; DB 14; Length 245;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 207

RESULT 12
 US-10-304-630-17
 Sequence 17, Application US/10304630
 Publication No. US20030161836A1
 GENERAL INFORMATION:
 APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/10/304,630
 PRIOR FILING DATE: 2002-11-26
 PRIOR APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 17
 LENGTH: 252
 TYPE: PRT
 ORGANISM: Cebus sp.
 US-10-304-630-17

Query Match
 Best Local Similarity 100.0%; Score 244; DB 14; Length 252;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 169 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 214

RESULT 13
 US-09-823-494-20
 Sequence 20, Application US/09823494
 Publication No. US20010041790A1
 GENERAL INFORMATION:
 APPLICANT: Cheesbro, Bruce W
 APPLICANT: Chabrey, Byron W
 APPLICANT: Priola, Suetete
 TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
 FILE REFERENCE: 50121
 CURRENT APPLICATION NUMBER: US/09/823,494
 PRIOR FILING DATE: 2001-03-30
 PRIOR APPLICATION NUMBER: 09/128,450
 NUMBER OF SEQ ID NOS: 29
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 20
 LENGTH: 253
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-823-494-20

Query Match
 Best Local Similarity 100.0%; Score 244; DB 9; Length 253;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 14
 US-09-904-987-3
 Sequence 3, Application US/09904987
 Patent No. US20020037908A1
 GENERAL INFORMATION:
 APPLICANT: No. US20020037908A1, Inc.
 TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prepathc
 FILE REFERENCE: 42108/26146
 CURRENT APPLICATION NUMBER: US/09/904,987
 CURRENT FILING DATE: 2001-07-12
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: Patent Ver. 3.0
 SEQ ID NO 3
 LENGTH: 253
 TYPE: PRT
 ORGANISM: homo sapiens
 PUBLICATION INFORMATION:
 DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM_009567
 DATABASE ENTRY DATE: 2001-04-17
 RELEVANT RESIDUES: (1)..(253)
 US-09-904-987-3

Query Match
 Best Local Similarity 100.0%; Score 244; DB 9; Length 253;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 215

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RESULT 15
US-09-919-172-57
; Sequence 57, Application US/09919172
; Patent No. US20020119463A1
; GENERAL INFORMATION:
; APPLICANT: Paris, Mary
; APPLICANT: Turner, Christopher M.
; TITLE OF INVENTION: PROSTATE CANCER MARKERS
; FILE REFERENCE: PA-0036 US
; CURRENT APPLICATION NUMBER: US/09/919,172
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/222,469
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PERL Program
; SEQ ID NO 57
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020119463A1 1256895CD1
US-09-919-172-57

Query Match      100.0%; Score 244; DB 9; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

CY      1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 46
      |||||||
Db      170 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQNCI 215

Search completed: December 3, 2004, 01:07:44
Job time : 55.4459 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214
Perfect score: 193
Sequence: 1 NNFVHDCVNTTKQHTVTTTKGENTPEVDKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729239 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	117	ABG94357	ABG94357 Modified
2	193	100.0	117	ABG80669	ABG80669 Human pri
3	193	100.0	117	ADD24196	ADD24196 Modified
4	193	100.0	124	ABG94340	ABG94340 Mouse mpr
5	193	100.0	124	ABG80652	ABG80652 Mouse tru
6	193	100.0	124	ADD24200	ADD24200 mpr-PC-BK-
7	193	100.0	142	AAW17686	AAW17686 Prion pro
8	193	100.0	163	ADB63859	ADB63859 Human pri
9	193	100.0	200	ABG31907	ABG31907 Human pri
10	193	100.0	208	AAW07316	AAW07316 Mouse pri
11	193	100.0	208	AAW07318	AAW07318 Human pri
12	193	100.0	208	AAW07327	AAW07327 Mouse pri
13	193	100.0	208	AAW07329	AAW07329 Human pri
14	193	100.0	208	ABG31902	ABG31902 Human pri
15	193	100.0	208	ABG31904	ABG31904 Chimera-t
16	193	100.0	208	ADJ66133	ADJ66133 Mouse pri
17	193	100.0	209	ABG31905	ABG31905 HCHV type
18	193	100.0	211	AAW30801	AAW30801 Amino aci
19	193	100.0	225	ABR42793	ABR42793 Rat prion
20	193	100.0	226	ADB85240	ADB85240 Rat prion
21	193	100.0	245	AAW72342	AAW72342 Monkey pr
22	193	100.0	245	AAW72352	AAW72352 Cercopit
23	193	100.0	253	AAW86715	AAW86715 Human pri
24	193	100.0	253	AAW69660	AAW69660 Human pri
25	193	100.0	253	AAW85901	AAW85901 Human pri

26	193	100.0	253	AAW07994	AAW07994 Human pri
27	193	100.0	253	AAW81485	AAW81485 Human pri
28	193	100.0	253	AAW06272	AAW06272 Human pri
29	193	100.0	253	AAW15035	AAW15035 Human pri
30	193	100.0	253	AAW12339	AAW12339 Chimpanze
31	193	100.0	253	AAW72347	AAW72347 Prion pro
32	193	100.0	253	AAW72353	AAW72353 Guereza p
33	193	100.0	253	AAW72344	AAW72344 Rhesus mo
34	193	100.0	253	AAW72350	AAW72350 Gibbon pr
35	193	100.0	253	AAW72351	AAW72351 Marmoset
36	193	100.0	253	AAW72348	AAW72348 Hamadryas
37	193	100.0	253	AAW72346	AAW72346 Prion pro
38	193	100.0	253	AAW72356	AAW72356 Siadang p
39	193	100.0	253	AAW72346	AAW72346 Prion pro
40	193	100.0	253	AAW72355	AAW72355 Prion pro
41	193	100.0	253	AAW72349	AAW72349 Prion pro
42	193	100.0	253	AAW72340	AAW72340 Orangutan
43	193	100.0	253	AAW72338	AAW72338 Human pri
44	193	100.0	253	AAW72354	AAW72354 Capuchin
45	193	100.0	253	AAW72341	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
XX Human; mouse; rat; antimicrobial; anti-allergic; immunomodulatory;
KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN W0200256905-A2.
XX
PD 25-JUL-2002.
XX
PE 21-JAN-2002; 2002WC-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;
XX
WP1; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
XX diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX
This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organism comprising
XX at least one first attachment site, where the organism is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with the antigen
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC
 S0 Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTKGKGFETDVKMER 36
 Db 52 NNFVHDCVNITIKOHTVTTTKGKGFETDVKMER 87

RESULT 2
 ABG80669
 ID ABG80669 standard; protein; 117 AA.
 AC
 XX ABG80669;
 DT 29-NOV-2002 (first entry)

DE Human prion protein/cysteine-containing peptide fusion protein.
 XX
 XX

KM Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM graft versus host disease; amyloid beta; Abeta 1-42; influenza; mitein;
 KM adult respiratory distress syndrome; Igg-mediated allergic reaction; anaphylaxis;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's disease;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KM angiotensin-converting enzyme; lymphadenopathy; Alzheimers disease;
 KM rheumatoid arthritis; diabetes; infectious disease; lymphadenopathy;
 KM enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.

PN MO200256907-A2.

PD 25-JUL-2002.

PF 21-JAN-2002; 2002MO-IB000168.

XX 19-JAN-2001; 2001JUS-0262379P.
 PR 04-MAY-2001; 2001JUS-0288549P.
 PR 05-OCT-2001; 2001JUS-0326998P.
 PR 07-NOV-2001; 2001JUS-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVA) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.

PI Maurer P, Lechner F, Ortman R, Luegend R, Staufenbiel M, Frey P,

PI Renner WA, Bachmann M, Tissot A, Seibel P, Plosssek C;
 XX WFI; 2002-636514/68.

PT Molecular antigen array used in the production of vaccines for infectious
 XX diseases.
 XX
 XX Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organism comprising at least one first attachment
 CC site, where the organism is connected to the core particle by at least
 CC one second attachment site, where the antigen or antigenic determinant with at least
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, Igg-mediated allergic reactions, anaphylaxis, adult
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angiotensin-converting enzyme, lymphadenopathy, Alzheimers disease;
 CC rheumatoid arthritis; diabetes; multiple sclerosis; Alzheimer's disease;
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 XX protein)

S0 Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTKGKGFETDVKMER 36
 Db 52 NNFVHDCVNITIKOHTVTTTKGKGFETDVKMER 87

RESULT 3
 ADD24196
 ID ADD24196 standard; protein; 117 AA.
 AC
 XX ADD24196;
 DT 15-JAN-2004 (first entry)

DE Modified human prion protein amino acid sequence.
 XX
 XX

KM vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mutant; mitein.

OS Synthetic.
 OS prion.

PN MO2003059366-A2.

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 XX
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX PA Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX PI WPI; 2003-598483/56.
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Disclosure; SEQ ID NO 89; 246bp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medication or in manufacturing a medication
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (Prp) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 XX Sequence 117 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNPFVHDCVNIITIKQHTVTITTKGENFTEDVKMER 36
 DB 52 NNPFVHDCVNIITIKQHTVTITTKGENFTEDVKMER 87
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrp protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN W0200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000166.
 XX
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Sebbel P;
 PI Ploesek C;
 XX
 XX WPI; 2002-627351/67.
 DR
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 XX Disclosure; Page 438; 441pp; English.
 XX
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Q β eta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic, used in
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 XX Sequence 124 AA;
 SQ
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNPFVHDCVNIITIKQHTVTITTKGENFTEDVKMER 36
 DB 53 NNPFVHDCVNIITIKQHTVTITTKGENFTEDVKMER 88
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β eta 1-42; influenza; muten;
 KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angiotensinoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX
 XX Prion protein peptide Hu 90-231.
 KW Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 XX Homo sapiens.
 OS
 XX MO9716728-A1.
 PN
 XX 09-MAY-1997.
 PD
 XX 28-OCT-1996; 96WO-US017462.
 PF
 XX 02-NOV-1995; 95US-00556823.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 XX Prusiner SB, Kaneko K, Cohen FE;
 PI
 XX WPI; 1997-272248/24.
 DR
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 XX assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PS
 XX Claim 11; Page 7-38; 50pp; English.
 XX
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 193; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 9.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
 DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 119
 RESULT 8
 ADB63859 standard; protein; 163 AA.
 ID ADB63859;
 AC
 XX ADB63859;
 DT
 XX 04-DEC-2003 (first entry)
 DE Human protein encoded by clone ASTRO20055570.
 XX
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 XX Homo sapiens.
 OS
 XX EP1308459-A2.
 PN
 XX 07-MAY-2003.
 PD
 XX 28-MAR-2002; 2002EP-00007401.
 PF
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX Iisogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 XX WPI; 2003-450961/43.
 DR
 XX N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS
 XX Claim 1; Page; 222pp; English.
 XX
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 CC
 XX Sequence 163 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 1.1e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 118
 RESULT 9
 ABG31907 standard; protein; 200 AA.
 ID ABG31907
 AC
 XX ABG31907;
 DT
 XX 05-NOV-2002 (first entry)
 DE Human prion protein related peptide #6.
 XX
 XX Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 KM
 XX Homo sapiens.
 OS
 XX WO200261418-A1.
 PN
 XX 08-AUG-2002.
 PD
 XX

	RESULT 10
ID	AAB07316
XX	AAB07316 standard; protein; 208 AA.
AC	AAB07316;
XX	
DT	17-OCT-2000 (first entry)
XX	
DE	Mouse prion protein sequence.
XX	
KW	Mouse; prion protein; transmissible spongiform encephalopathy;
XX	bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
OS	Mus sp.
XX	
PH	Key
FT	Region
FT	Location/Qualifiers
FT	37..68
FT	/note="Repeat region consisting of tandem repeats of
FT	Disulfide bond
FT	repeat unit: PHGGGWGQ (AAB07319)"
FT	Modified-site
FT	208
FT	/note="C-terminal phospho-inositol glycolipid membrane
XX	anchor (-GPI)"
PN	MO200029850-A1.
PD	25-MAY-2000.
XX	
Pf	27-OCT-1999;
XX	99WO-FI000897.
PR	17-NOV-1998;
XX	98FI-00002481.
PA	(MALL-) MALLAC OY.
PA	(BBSR-) BBSRC OFFICE.

	Query Match	100.0%;	Score 193,	DB 3;	Length 208;
	Best Local Similarity	100.0%;	Pred. No.1,5e-18;		
	Matches	36;	Conservative	0;	Mismatches 0;
				Indels	0; Gaps
CY	1 NNFVHDCVNITTKOHTVTTTTGGENFETLVKMMER	36			
Dd	150 NNFVHDCVNITTKOHTVTTTTGGENFETLVKMMER	185			

XX	NOZ00029850-A1.
XX	
PD	25-MAY-2000.
XX	
PF	27-OCT-1999; 99MO-F1000897.
XX	
PR	17-NOV-1998; 98FI-00002481.
XX	
PA	(WALL-) WALLAC OY.
PA	(BBSR-) BBSRC OFFICE.
XX	
PI	Hope J, Barnard GR, Birkett CR;
XX	
DR	WFI; 2000-387880/33.
XX	
CT	Novel Immunoassay for nitro metabol-

novel immunoassay for prion protein, used for the determination of

transmissible spongiform encephalopathies in bovines.

Discloure; Page 43-44; 50pp; English.

The present sequence is the human prion protein (PrP) sequence.

Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a PrP epitope is captured by an antibody, which is then detected. The presence of PrP indicates TSE. PrP epitopes (AAB07320-B07326) are derived from the protease resistant core of PrP that is occluded when the PrP is in an aggregated state

Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKQHTVTTTGGENTFTEDVQMMER 36
151 NNFVHDCVNITIKQHTVTTTGGENTFTEDVQMMER 186

RESULT 12
AAB07327 standard; protein; 208 AA.

AAB07327;
17-OCT-2000 (first entry)

Mouse prion protein sequence.

Mouse; prion protein; transmissible spongiform encephalopathy;
bovine spongiform encephalopathy; TSE diagnosis; PrP.

Mus sp.

Key Location/Qualifiers
Region 37..68
/note="Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"
Disulfide-bond 156..191
Modified-site 208
/note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

WO200029849-A1.
25-MAY-2000.
27-OCT-1999; 99WO-FI000896.
17-NOV-1998; 98FI-00002480.

(WALL-) WALLAC OY.
(BBSR-) BBSRC OFFICE.

Hope J, Barnard GJR, Birkett CR;
WPI; 2000-399778/34.

New immunoassay for prion protein, used for determination of transmissible spongiform encephalopathies in mammals, comprises specific capture antibody.

Discloure; Page 41-42; 50pp; English.

The present sequence is the mouse prion protein (PrP) sequence.

Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a PrP epitope is captured by an antibody, which is then detected. The presence of PrP indicates TSE. PrP epitopes (AAB07320-B07326) are derived from the protease resistant core of PrP that is occluded when the PrP is in an aggregated state

Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKQHTVTTTGGENTFTEDVQMMER 36
150 NNFVHDCVNITIKQHTVTTTGGENTFTEDVQMMER 185

RESULT 13
AAB07329 standard; protein; 208 AA.

AAB07329;
17-OCT-2000 (first entry)

Human prion protein sequence.

Human; prion protein; transmissible spongiform encephalopathy;
bovine spongiform encephalopathy; TSE diagnosis; PrP.

Homo sapiens.

Key Location/Qualifiers
Region 29..69
/note="Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"
Disulfide-bond 157..192
Modified-site 208
/note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

WO200029849-A1.
25-MAY-2000.
27-OCT-1999; 99WO-FI000896.
17-NOV-1998; 98FI-00002480.

(WALL-) WALLAC OY.
(BBSR-) BBSRC OFFICE.

Hope J, Barnard GJR, Birkett CR;
WPI; 2000-399778/34.

New immunoassay for prion protein, used for determination of transmissible spongiform encephalopathies in mammals, comprises specific capture antibody.

Discloure; Page 43-44; 50pp; English.

The present sequence is the human prion protein (PrP) sequence.

Conversion of the normal cellular form of PrP into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 36
 151 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 186

RESULT 14

ABG31902
 ID ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KM Prion; human; follicular dendritic cells; FDC; infection;
 XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX

SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 36
 151 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 186

RESULT 15
 ABG31904
 ID ABG31904 standard; protein; 208 AA.

AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimera-type prion protein #2.

KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
 XX food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

XX MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002WO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 XX

SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 36
 151 NNFVHDCVNTTIKQHTVTTTNGENFTETDVQMMER 186

Search completed: December 3, 2004, 00:55:36
 Job time : 59.6066 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214
Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	193	100.0	226 2 A53892	prion-related prot
2	193	100.0	232 2 S71041	major prion protei
3	193	100.0	241 2 S71048	major prion protei
4	193	100.0	241 2 S71056	major prion protei
5	193	100.0	245 2 S53627	major prion protei
6	193	100.0	245 2 S71045	major prion protei
7	193	100.0	252 2 S53634	major prion protei
8	193	100.0	252 2 S53631	major prion protei
9	193	100.0	253 1 UHUH	major prion protei
10	193	100.0	253 2 S53624	major prion protei
11	193	100.0	253 2 S53623	major prion protei
12	193	100.0	253 2 S53620	major prion protei
13	193	100.0	253 2 S53625	major prion protei
14	193	100.0	253 2 I84423	major prion protei
15	193	100.0	253 2 S71055	major prion protei
16	193	100.0	253 2 S53617	major prion protei
17	193	100.0	253 2 S53635	major prion protei
18	193	100.0	253 2 S53614	major prion protei
19	193	100.0	253 2 I17032	major prion protei
20	193	100.0	253 2 I61847	major prion protei
21	193	100.0	253 2 S53616	major prion protei
22	193	100.0	253 2 S53618	major prion protei
23	193	100.0	253 2 S53619	major prion protei
24	193	100.0	254 2 B34759	prion protein - go
25	193	100.0	254 2 A34759	prion protein - ch
26	193	100.0	254 2 A23544	major prion protei
27	192	99.5	252 2 I61848	major prion protei
28	192	99.5	260 2 S53629	major prion protei
29	191	99.0	264 2 S37137	prion protein - gr

30	189	97.9	239 2 S53633	major prion protei
31	188	97.4	254 1 UHVIH	major prion PrP-Sc
32	188	97.4	256 2 JU0268	major prion protei
33	188	97.4	257 2 A23545	major prion PrP27-
34	188	97.4	264 2 A54330	major prion protei
35	187	96.9	256 2 S37149	prion protein - go
36	187	96.9	256 2 A54281	major prion protei
37	185	95.9	257 2 JU0190	major prion protei
38	182	94.3	252 2 JU6175	prion protein - ra
39	58	30.1	139 2 H90004	hypothetical prote
40	54	28.0	423 2 E97165	flagellar hook pro
41	54	28.0	511 2 C69199	phenylalanine-tRNA
42	53	27.5	267 1 UJCH	major prion protei
43	53	27.5	267 2 A37372	prion protein homo
44	53	27.5	273 2 A46280	prion protein - ch
45	53	27.5	346 2 B71496	tryptophan-tRNA 11

ALIGNMENTS

RESULT 1
A53892
prion-related protein - rat (fragment)
C/Species: Rattus norvegicus (Norway rat)
C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
R/Accession: A53892
R/Lab: Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Burton, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A/Title: Cloning of rat "prion-related protein" cDNA.
A/Reference number: A53892; MUID:88037055; PMID:2889848
A/Accession: A53892
A/Status: preliminary
A/Molecule type: mRNA
A/Accession: 571041; S53630
R/Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: 571041
A/Accession: 571041
A/Molecule type: DNA
A/Residues: 1-232 <SCH>
A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437
R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53630
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-194, 'R', 196-231 <SCH>
A/Cross-references: EMBL:U08309
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match	100.0%;	Score 193;	DB 2;	Length 226;
Best Local Similarity	100.0%;	Pred. No. 4e-18;		
Matches 36;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
QY	1	NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMMER 36		
DB	145	NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMMER 180		
RESULT 2				
S71041		major prion protein - black-handed spider monkey (fragment)		
C/Species: Ateles geoffroyi (black-handed spider monkey)				
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004				
A/Accession: S71041; S53630				
R/Schatzl, H.M.				
submitted to the EMBL Data Library, April 1994				
A/Reference number: 571041				
A/Accession: 571041				
A/Molecule type: DNA				
A/Residues: 1-232 <SCH>				
A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437				
R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.				
U. Mol. Biol. 245, 362-374, 1995				
A/Title: Prion protein gene variation among primates.				
A/Reference number: S53614; MUID:95139066; PMID:7837269				
A/Accession: S53630				
A/Status: nucleic acid sequence not shown				
A/Molecule type: DNA				
A/Residues: 1-194, 'R', 196-231 <SCH>				
A/Cross-references: EMBL:U08309				
C/Superfamily: major prion protein				
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie				
Query Match	100.0%;	Score 193;	DB 2;	Length 232;

Best Local Similarity 100.0%; Pred. No. 4.1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0;

Qy 1 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 36
Db 157 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 192

RESULT 3

S71048

major prion protein - Callicebus moloch (fragment)
C/Species: Callicebus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A/Accession: S71048; S53632
A/Reference number: 553614; PMID:95139066; PMID:7837269

submitted to the EMBL Data Library, April 1994
A/Accession: S71048
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:9475585; PIDN:AAC50100.1; PID:94755

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553614; PMID:95139066; PMID:7837269

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 36
Db 166 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 201

RESULT 4
S71056
major prion protein - mandrill (fragment)
C/Species: Papio sphinx (Mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A/Accession: S71056; S53621
A/Reference number: 553614; PMID:95139066; PMID:7837269

submitted to the EMBL Data Library, April 1994
A/Accession: S71056
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:9474364; PIDN:AAC50091.1; PID:94743

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553614; PMID:95139066; PMID:7837269

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 36
Db 1 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 36

Db 166 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 201

RESULT 5

S53627

major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553614; PMID:95139066; PMID:7837269

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08291
submitted to the EMBL Data Library, April 1994

A/Accession: S71043
A/Molecule type: DNA
A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>

A/Cross-references: EMBL:U08291; NID:9474340; PIDN:AAC50080.1; PID:9474341

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 36
Db 165 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 200

RESULT 6
S71045
major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A/Accession: S71045; S53628
A/Reference number: 553614; PMID:95139066; PMID:7837269

submitted to the EMBL Data Library, April 1994
A/Accession: S71045
A/Molecule type: DNA

A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:9474342; PIDN:AAC50081.1; PID:947434

U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: 553628
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>

A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 36
Db 165 NNFVHDCVNTTQKHTTTTGGNFETDVKMMR 200

RESULT 7

S53634


```

major prion protein - common marmoset
C:Species: Callithrix jacchus (Common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53634
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71047
A:Accession: S71047
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4, 5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
Db 172 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 207

RESULT 8
major prion protein - brown capuchin
C:Species: Cebus apella (brown capuchin, black-capped capuchin)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53631; S71044
R:Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53631
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40249; EMBL:U08295
R:Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71044
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4, 5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
Db 172 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 207

RESULT 9
major prion protein precursor - human
C:Species: Homo sapiens (man)
C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A24177; A40372; A05011; S14078; I54322; I68597; I58135; I59184; I79633; I79597

```

A:Kretzschmar, H.A.; Storrting, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; De
DNA 5, 315-324, 1986
A:Title: Molecular cloning of a human prion protein cDNA.
A:Reference number: A24173; MUID:86300093; PMID:3755672
A:Accession: A24173
A:Molecule type: mRNA
A:Residues: 1-253 <KRE>
A:Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
R:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A:Title: Genomic structure of the human prion protein gene.
A:Reference number: A40372; MUID:91328137; PMID:1678248
A:Accession: A40372
A:Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-80,89-253 <PUC>
A:Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847
A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not b
R:Lisao, Y.C.; J. Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
Science 233, 364-367, 1986
A:Reference number: A05017; MUID:86261778; PMID:3014653
A:Accession: A05017
A:Molecule type: mRNA
A:Residues: 8-117,119-253 <LTA>
A:Cross-references: GB:D00015; NID:g220015; PIDN:BAAO011.1; PID:g220016; GB:M13667; NID
R:Tabiliov, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,
EMBO J. 10, 513-519, 1991
A:Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is
A:Reference number: S14078; MUID:91160504; PMID:1672107
A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72,'X',74-76,'XX',79,'XXX',83-86,111-128,'V',130-150 <TAG>
R:Didrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A:Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: 154322; MUID:93250789; PMID:1363802
A:Accession: 154322
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83,92-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: 168597
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RE3>
A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McComb, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.; I
Neurology 42, 422-427, 1992
A:Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutator
A:Reference number: 158135; MUID:92140671; PMID:1736177
A:Accession: 158135
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91,'PHGGGMGQPHGGGQPHGGGMGQPHGGGMGQPHGGGMGQPHGGG' <RE2>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AAB2133.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McComb, W.R.; Goldhaber, D.; Swergold, G.D.; Wille, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A:Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, ar
A:Reference number: 159184; MUID:92073400; PMID:1683708
A:Accession: 159184
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRIP
A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A:Note: one intron occurs before the initiator codon
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F:1-22/Domain: signal sequence #status predicted <SIG>
 F:23-230/Product: major prion protein #status predicted <MAT>
 F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-O)
 F:123-253/Domain: carboxyl-terminal propenptide #status predicted <CTP>
 F:1179-214/Dissulfide bonds: #status predicted
 F:181,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 10

S53624

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)

C/Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53624; S71051

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53624

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08311

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71051

A/Molecule type: DNA

A/Residues: 1-210 'B', 212-253 <SCW>

A/Cross-references: EMBL:U08311; NID:9474346; PIDN:AAC50089.1; PID:9474344

A/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 11

S53623

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)

C/Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53623; S71052

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53623

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08298

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71052

A/Molecule type: DNA

A/Residues: 1-210 'B', 212-253 <SCW>

A/Cross-references: EMBL:U08298; NID:9474354; PIDN:AAC50087.1; PID:9474355

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 12

S53620

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)

C/Date: 28-Oct-1996 #sequence _revision 07-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53620; S71058

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53620

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08294

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71058

A/Molecule type: DNA

A/Residues: 1-210 'B', 212-253 <SCW>

A/Cross-references: EMBL:U08294; NID:9474346; PIDN:AAC50083.1; PID:9474347

A/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;QY 1 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 DB 173 NNFFVHDCVNITIKOHTVTTTGGNFETDVKKMER 208

RESULT 13

S53625

major prion protein - Japanese macaque

C/Species: Macaca fuscata (Japanese macaque)

C/Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53625; S71053

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53625

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08301

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71053

A/Molecule type: DNA

A/Residues: 1-210 'B', 212-253 <SCW>

A/Cross-references: EMBL:U08301; NID:9474360; PIDN:AAC50090.1; PID:9474361

A/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004

C:Accession: 184423; S53622; S71054

R:Schaefer, H.M.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A:Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 136907; MUID:95083661; PMID:7991600

A:Accession: 184423

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U5163; NID:9595850; PIDN:AAA68635.1; PID:95958

R:Schaefer, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schaefer, H.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71041

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schaefer, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:9474370; PIDN:AAC50094.1; PID:94743

R:Schaefer, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210 'R', 212-247 <SCM>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:38:38

Job time : 11.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 58.1902 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTTTTGTGKENTFTDVKRMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UnIProt_02:.*
1: uniprot_sprot:.*
2: uniprot_trembl:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	193	100.0	232 1	P40246 atelae geof
2	193	100.0	238 1	Q95145 cercocebus
3	193	100.0	238 1	P40246 atelae geof
4	193	100.0	238 2	Q86XRI homo sapien
5	193	100.0	240 2	Q8VHV4 cercocebus
6	193	100.0	241 1	P40248 callicephus
7	193	100.0	241 1	P40255 mandrillus
8	193	100.0	245 1	P40250 cercocebus
9	193	100.0	246 1	P40250 cercocebus
10	193	100.0	246 1	P40250 cercocebus
11	193	100.0	246 1	P40250 cercocebus
12	193	100.0	246 1	P40250 cercocebus
13	193	100.0	246 2	Q8VHV4 cercocebus
14	193	100.0	248 2	Q8VHV4 cercocebus
15	193	100.0	252 1	P40247 callithrix
16	193	100.0	252 1	P40249 cebus ape1
17	193	100.0	253 1	P40251 colobus que
18	193	100.0	253 1	P40252 gorilla gor
19	193	100.0	253 1	P40156 homo sapien
20	193	100.0	253 1	P40156 homo sapien
21	193	100.0	253 1	P40156 homo sapien
22	193	100.0	253 1	P40156 homo sapien
23	193	100.0	253 1	P40156 homo sapien
24	193	100.0	253 1	P40156 homo sapien
25	193	100.0	253 1	P40156 homo sapien
26	193	100.0	253 2	Q6JL99 macaca mulia
27	193	100.0	253 2	Q6JL99 macaca mulia
28	193	100.0	253 2	Q6JL99 macaca mulia
29	193	100.0	253 2	Q6JL99 macaca mulia
30	193	100.0	253 2	Q6JL99 macaca mulia
31	193	100.0	254 1	P40258 saimiri sci

32	193	100.0	254 1	P40156 homo sapien
33	193	100.0	254 1	P40156 homo sapien
34	193	100.0	254 1	P40156 homo sapien
35	193	100.0	254 1	P40156 homo sapien
36	193	100.0	254 2	Q9Z0T4 sigmodon fu
37	193	100.0	254 2	Q9Z0T4 sigmodon fu
38	193	100.0	254 2	Q9Z0T4 sigmodon fu
39	193	100.0	254 2	Q9Z0T4 sigmodon fu
40	193	100.0	254 2	Q9Z0T4 sigmodon fu
41	193	100.0	254 2	Q9Z0T4 sigmodon fu
42	193	100.0	254 2	Q9Z0T4 sigmodon fu
43	193	100.0	254 2	Q9Z0T4 sigmodon fu
44	193	100.0	254 2	Q9Z0T4 sigmodon fu
45	193	100.0	254 2	Q9Z0T4 sigmodon fu

ALIGNMENTS

RESULT 1	ID	P40246	STANDARD	PRT	232 AA
AC	P40246				
DT	01-FEB-1995 (Rel. 31, Created)				
DT	01-FEB-1995 (Rel. 31, Last sequence update)				
DT	05-JUL-2004 (Rel. 44, Last annotation update)				
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).				
GN	Name=PRNP				
OS	Ateles Geoffroyi (Black-handed spider monkey).				
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.				
OX	NCBI_TaxID=9509;				
RN	(1)				
RP	SEQUENCE FROM N.A.				
RA	MDL=95139066; PubMed=7837269;				
RT	Schaezel H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;				
RU	"Prion protein gene variation among primates."				
RU	J. Mol. Biol. 245:362-374(1995).				
CC	- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.				
CC	- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "fibrils".				
CC	- DISSEMINATION: Attached to the membrane by a GPI-anchor. animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.				
CC	- SIMILARITY: Belongs to the prion family.				
CC	THIS SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.ebi.ac.uk/announcements or send an email to license@ebi.ac.uk).				
CC	EMBL: U08309; AAC50097.1; -				
DR	PIR: S71041; S71041.				
DR	HSP: P23907; 1G04.				
DR	InterPro: IPR00817; Prion.				
DR	Pfam: PF00377; Prion; 1.				
DR	Pfam: PF03991; Prion octapep; 5.				
DR	PRINTS: PR00341; PRION.				
DR	PROSITE: PS00291; PRION 1; 1.				
DR	PROSITE: PS00706; PRION 2; 1.				
KW	Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.				
FT	NON_TER				
FT	SIGNAL				
FT	CHAIN				
FT	PROPEP				
FT	LIPID				

FT DISULFID 163 198 similarity.
 FT CARBOHYD 165 165 By similarity.
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 51 0.
 FT REPEAT 52 59 1.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT NON_TER 232 232 4.
 SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;
 Query Match
 Best Local Similarity 100.0%; Score 193; DB 1; Length 232;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 157 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 192
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
 ID PRT; 238 AA.
 AC 095200; STANDARD; PRT; 238 AA.
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Cercopithecus aethiops, and
 OS Macaca sylvanus (Barbary ape).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=36222, 9546;
 RN SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion.";
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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 DR EMBL; U75384; AAB50623.1; -;
 DR EMBL; U75382; AAB50629.1; -;
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 215
 FT PROPEP 216 238
 FT LIPID 215 215
 FT DISULFID 164 199
 FT CARBOHYD 166 166 By similarity.
 FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 SQ SEQUENCE 238 AA; 26123 MW; 5F59A3B8C3E3531B CRC64;
 Query Match
 Best Local Similarity 100.0%; Score 193; DB 1; Length 238;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Db 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 193
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
 ID PRT; 238 AA.
 AC 095270; STANDARD; PRT; 238 AA.
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP; Synonyms=Prp;
 OS Theropithecus gelada (Gelada baboon).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Theropithecus.
 OX NCBI_TaxID=9565;
 RN SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion.";
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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 DR EMBL; U75383; AAB50630.1; -;
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.

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DR PROSITE; PS00706; PRION_2; 1
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER
FT SIGNAL.
FT CHAIN.
FT PROPEP
FT DISULFID
FT LIPID
FT CARBOHYD
FT CARBOHYD
FT DOMAIN
FT REPEAT
FT REPEAT
FT REPEAT
FT REPEAT
FT REPEAT
FT NON_TER
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match
Best Local Similarity 100.0%; Score 193; DB 1; Length 238;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 36
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 193

RESULT 4
Q086XR1 PRELIMINARY; PRT; 238 AA.
AC Q086XR1;
DT 01-JUN-2003 (TREMBLrel. 24, Created)
DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AAC83635.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 238;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 36
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 193

RESULT 5
Q08VH4 PRELIMINARY; PRT; 240 AA.
AC Q08VH4;

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DT 01-MAR-2002 (TREMBLrel. 20, Created)
DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 240;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 36
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMER 200

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Galliebus moloch (Dusky tit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
OC Calliebus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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DR EMBL; U08312; AAC50100.1; -
 DR PIR; S71048; S71048.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 FT SIGNAL.
 FT NON_TER
 FT SIGNAL 1 1
 FT CHAIN <1 15 By similarity.
 FT PROPEP 16 223 Major prion protein.
 FT DISULFID 224 >241 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By
 similarity).
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
 O.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 SO SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 201

RESULT 7
 PRO_MANSP STANDARD; PRT; 241 AA.
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PrNP;
 OS Mandibullus sphinx (Mandibull) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandrillus.
 OX NCBI_TaxID=5561;
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates";
 RU J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U08303; AAC50091.1; -
 DR PIR; S71056; S71056.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL.
 FT NON_TER
 FT SIGNAL 1 1
 FT CHAIN <1 15 By similarity.
 FT PROPEP 16 223 Major prion protein.
 FT DISULFID 224 >241 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By
 similarity).
 FT CARBOHYD 174 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
 O.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 SO SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 201

RESULT 8
 PRO_CERAE STANDARD; PRT; 245 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
 GN Name=PrNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=5534; 36224;
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates";
 RU J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called


```

CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      or send an email to license@isb-sib.ch).
CC      -----
CC      EMBL, U08291; AAC50080.1; -.
CC      EMBL, U08292; AAC50081.1; -.
CC      PIR, S53627; S53627.
CC      PIR, S71045; S71045.
CC      HSSP, P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam, PF00377; Prion; 1.
CC      Pfam, PF03991; Prion, octapep; 5.
CC      PRINTS, PR00341; PRION.
CC      PROSITE, PS00291; PRION_1; 1.
CC      PROSITE, PS00706; PRION_2; 1.
CC      KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      FT SIGNAL 1 222 By similarity.
CC      FT CHAIN 23 222 Major prion protein.
CC      FT PROPEP 223 245 Removed in mature form (By similarity).
CC      FT LIPID 222 222 GPI-anchor amidated serine (By
CC      similarity).
CC      FT DISULFID 171 206 By similarity.
CC      FT CARBOHYD 173 173 N-linked (GlcNAc...) (Potential).
CC      FT CARBOHYD 189 189 N-linked (GlcNAc...) (Potential).
CC      FT DOMAIN 51 83 4 X 8 AA tandem repeats of P-H-G-G-W-G-
CC      FT REPEAT 51 59 0.
CC      FT REPEAT 60 67 1.
CC      FT REPEAT 68 75 2.
CC      FT REPEAT 76 83 3.
CC      FT REPEAT 77 84 4.
CC      SQ SEQUENCE 245 AA; 26885 MW; D582B582726C99A CRC64;
CC      Query Match 100.0%; Score 193; DB 1; Length 245;
CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC      Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 36
CC      Db 165 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 200

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RL      Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
CC      EMBL, U75386; AAB50625.1; -.
CC      HSSP, P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam, PF00377; Prion; 1.
CC      Pfam, PF03991; Prion, octapep; 6.
CC      PRINTS, PR00341; PRION.
CC      PROSITE, PS00291; PRION_1; 1.
CC      PROSITE, PS00706; PRION_2; 1.
CC      KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      FT NON TER 1 1
CC      FT SIGNAL 1 15 By similarity.
CC      FT CHAIN 16 223 Major prion protein.
CC      FT PROPEP 224 246 Removed in mature form (By similarity).
CC      FT LIPID 223 223 GPI-anchor amidated serine (By
CC      similarity).
CC      FT DISULFID 172 207 By similarity.
CC      FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
CC      FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
CC      FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC      FT REPEAT 44 52 0.
CC      FT REPEAT 53 60 1.
CC      FT REPEAT 61 68 2.
CC      FT REPEAT 69 76 3.
CC      FT REPEAT 77 84 4.
CC      FT REPEAT 78 85 5.
CC      SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
CC      Query Match 100.0%; Score 193; DB 1; Length 246;
CC      Best Local Similarity 100.0%; Pred. No. 5.5e-18;
CC      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC      Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 36
CC      Db 166 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMMR 201

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RESULT 9
PRIO_CERMO STANDARD; PRT; 246 AA.
ID P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."

```

```

RESULT 10
PRIO_CERNE STANDARD; PRT; 246 AA.
ID P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (De Brazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36227;
RN [1]
RP SEQUENCE FROM N.A.

```

RA van der Kuyt A.C., Dekker J.T., Goudemits J.
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: U75387; AAB50626.1; -
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC PRINTS: PR00391; Prion octapep; 6.
 CC PROSITE: PS00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KX Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON_TER 1 15
 CC FT SIGNAL 1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 CC Query Match 100.0%; Score 193; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 36
 CC 166 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 201
 CC
 CC RESULT 11
 CC PRIO CERTO STANDARD; PRT; 246 AA.
 CC ID PRIO CERTO
 CC AC 095176;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecinae; Cercopithecus.

OK NCBI_TaxID=9531;
 RN [1]
 RA SEQUENCE FROM N.A.
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75385; AAB50628.1; -
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC PRINTS: PR00391; Prion octapep; 6.
 CC PROSITE: PS00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KX Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON_TER 1 15
 CC FT SIGNAL 1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SQ SEQUENCE 246 AA; 26914 MW; F58679CBBECSAD7 CRC64;
 CC Query Match 100.0%; Score 193; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 36
 CC 166 NNFFVDCVNTIKQHTVTTTKGENTETDVKMER 201
 CC
 CC RESULT 12
 CC PRIO BRYPA STANDARD; PRT; 246 AA.
 CC ID PRIO BRYPA
 CC AC 095174;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

```

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopitheciidae;
OC Cercopitheciinae; Erythrocebus.
OX NCBI_TaxID=9538;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@ebi.ac.uk).
CC -----
DR EMBL: U75388; AAB50627.1; -.
DR HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1
FT SIGNAL 1
FT CHAIN 15
FT PROPEP 16
FT PROPEP 224
FT LIPID 223
FT FT 223
FT DISULFID 172
FT CARBOHYD 174
FT CARBOHYD 190
FT CARBOHYD 190
FT DOMAIN 44
FT FT 84
FT REPEAT 44
FT REPEAT 52
FT REPEAT 53
FT REPEAT 61
FT REPEAT 68
FT REPEAT 76
FT REPEAT 77
SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 201
RESULT 13
AA083636 PRELIMINARY; PRT; 246 AA.
AC AA083636;
DT 02-MAR-2004 (TREMBlrel. 27, Created)
DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)

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DE Prion protein (Fragment).
GN PRNP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RT "Polymorphisms of the prion protein gene in Korea."
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY219883; AA083636.1; -.
KM Prion.
FT NON_TER 1
FT NON_TER 1
SQ SEQUENCE 246 AA; 26884 MW; 309B1B3C8841566 CRC64;
Query Match 100.0%; Score 193; DB 2; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
Db 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 201
RESULT 14
Q8VHV5 PRELIMINARY; PRT; 248 AA.
AC Q8VHV5;
DT 01-MAR-2002 (TREMBlrel. 20, Created)
DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Clethrionomys.
OX NCBI_TaxID=51090;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nomo R.,
RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AF367624; AAL57231.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 248
FT NON_TER 248
SQ SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
Query Match 100.0%; Score 193; DB 2; Length 248;
Best Local Similarity 100.0%; Pred. No. 5.6e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 208
RESULT 15
PRIO_CALJA STANDARD; PRT; 252 AA.
AC P40247;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)

```

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DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Calithrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Euteria; Primates; Platyrrhini; Callitrichidae; Calithrix.
OX NCBI_TaxID:9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE:95139066; PubMed:7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U08304; AAC50092.1; --
DR PIR: S53634; S53634.
DR HSSP: P23907; 1804.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFD 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27639 MW; B2800B60FDC664 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 5,7e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 NNFFVHDCVNTTKKQHTVTTTGGSNFTETDYKMMER 36
Db 172 NNFFVHDCVNTTKKQHTVTTTGGSNFTETDYKMMER 207

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Search completed: December 3, 2004, 00:35:28
 Job time: 59.1902 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36

Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
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2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep.*
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep.*
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep.*
5: /cgn2_6/ptodata/1/1aa/PCTUS.COMB.pep.*
6: /cgn2_6/ptodata/1/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	142	1 US-08-556-823-10	Sequence 10, Appl
2	193	100.0	245	4 US-09-431-887-5	Sequence 5, Appl
3	193	100.0	245	4 US-09-431-887-15	Sequence 15, Appl
4	193	100.0	252	4 US-09-431-887-13	Sequence 13, Appl
5	193	100.0	252	4 US-09-431-887-17	Sequence 17, Appl
6	193	100.0	253	1 US-08-242-188-2	Sequence 2, Appl
7	193	100.0	253	1 US-08-509-261A-2	Sequence 2, Appl
8	193	100.0	253	1 US-08-660-626-8	Sequence 8, Appl
9	193	100.0	253	1 US-08-692-892-2	Sequence 2, Appl
10	193	100.0	253	2 US-08-713-939A-2	Sequence 2, Appl
11	193	100.0	253	2 US-08-868-162A-22	Sequence 22, Appl
12	193	100.0	253	3 US-09-031-168-8	Sequence 8, Appl
13	193	100.0	253	3 US-09-128-450-10	Sequence 20, Appl
14	193	100.0	253	3 US-09-036-579-2	Sequence 2, Appl
15	193	100.0	253	3 US-09-823-49A-20	Sequence 20, Appl
16	193	100.0	253	3 US-09-550-374-2	Sequence 2, Appl
17	193	100.0	253	4 US-09-431-887-1	Sequence 1, Appl
18	193	100.0	253	4 US-09-431-887-2	Sequence 2, Appl
19	193	100.0	253	4 US-09-431-887-3	Sequence 3, Appl
20	193	100.0	253	4 US-09-431-887-4	Sequence 4, Appl
21	193	100.0	253	4 US-09-431-887-7	Sequence 7, Appl
22	193	100.0	253	4 US-09-431-887-8	Sequence 8, Appl
23	193	100.0	253	4 US-09-431-887-9	Sequence 9, Appl
24	193	100.0	253	4 US-09-431-887-10	Sequence 10, Appl
25	193	100.0	253	4 US-09-431-887-11	Sequence 11, Appl
26	193	100.0	253	4 US-09-431-887-12	Sequence 12, Appl
27	193	100.0	253	4 US-09-431-887-14	Sequence 14, Appl

28	193	100.0	253	4 US-09-431-887-16	Sequence 16, Appl
29	193	100.0	253	4 US-09-431-887-18	Sequence 18, Appl
30	193	100.0	253	4 US-09-431-887-19	Sequence 19, Appl
31	193	100.0	253	4 US-09-943-906-2	Sequence 2, Appl
32	193	100.0	253	4 US-09-669-516C-8	Sequence 8, Appl
33	193	100.0	253	4 US-09-919-172-57	Sequence 57, Appl
34	193	100.0	253	4 US-09-976-594-72	Sequence 72, Appl
35	193	100.0	253	4 US-09-904-987-3	Sequence 3, Appl
36	193	100.0	254	1 US-08-242-188-1	Sequence 1, Appl
37	193	100.0	254	1 US-08-509-261A-1	Sequence 1, Appl
38	193	100.0	254	1 US-08-660-626-7	Sequence 7, Appl
39	193	100.0	254	1 US-08-692-892-1	Sequence 1, Appl
40	193	100.0	254	2 US-08-713-939A-1	Sequence 1, Appl
41	193	100.0	254	2 US-08-868-162A-21	Sequence 21, Appl
42	193	100.0	254	3 US-09-031-168-7	Sequence 7, Appl
43	193	100.0	254	3 US-09-128-450-19	Sequence 19, Appl
44	193	100.0	254	3 US-09-128-450-28	Sequence 28, Appl
45	193	100.0	254	3 US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
APPLICANT: Fred E. Cohen
TITLE OF INVENTION: Formation and use of prion protein
TITLE OF INVENTION: Formation and use of prion protein
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
FAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 7.4e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
DB 84 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 119

RESULT 2

US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match

Best Local Similarity 100.0%; Score 193; DB 4; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36

Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 200

RESULT 3

US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match

Best Local Similarity 100.0%; Score 193; DB 4; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36

Db 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 200

RESULT 4

US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04

; NUMBER OF SEQ ID NOS: 37

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 13

; LENGTH: 252

; TYPE: PRT

; ORGANISM: Callithrix sp.

US-09-431-887-13

Query Match

Best Local Similarity 100.0%; Score 193; DB 4; Length 252;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36

Db 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 207

RESULT 5

US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match

Best Local Similarity 100.0%; Score 193; DB 4; Length 252;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36

Db 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 207

RESULT 6

US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESS: Karl Bosicovic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-242-188-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5783655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPI TOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-660-626-8

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESSES:
ADDRESSER: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKHQTVTITTKGFETEDVKMMR 36
Db 173 NNFVHDCVNITIKHQTVTITTKGFETEDVKMMR 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKHQTVTITTKGFETEDVKMMR 36
Db 173 NNFVHDCVNITIKHQTVTITTKGFETEDVKMMR 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/0868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESSES:
ADDRESSER: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asciii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULE TYPE: linear
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suetelle
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match

Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGNFETTDVKMMER 36
DB 173 NNFFVHDCVNITIKQHTVTTTGGNFETTDVKMMER 208

RESULT 15

US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match

Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKQHTVTTTGGNFETTDVKMMER 36
DB 173 NNFFVHDCVNITIKQHTVTTTGGNFETTDVKMMER 208

Search completed: December 3, 2004, 00:18:55
Job time : 14.6328 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITKQHTVTTTGTGKENTETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

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4: /cgn2_6/ptodata/1/pubppa/US07_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubppa/PCTUS_PUBCOMB.pep.*
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11: /cgn2_6/ptodata/1/pubppa/US09C_PUBCOMB.pep.*
12: /cgn2_6/ptodata/1/pubppa/US10_NEW_PUB.pep.*
13: /cgn2_6/ptodata/1/pubppa/US10_PUBCOMB.pep.*
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15: /cgn2_6/ptodata/1/pubppa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/1/pubppa/US10_PUBCOMB.pep.*
17: /cgn2_6/ptodata/1/pubppa/US10_NEW_PUB.pep.*
18: /cgn2_6/ptodata/1/pubppa/US11_NEW_PUB.pep.*
19: /cgn2_6/ptodata/1/pubppa/US60_NEW_PUB.pep.*
20: /cgn2_6/ptodata/1/pubppa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	193	100.0	117	14	US-10-050-902-348
2	193	100.0	117	14	US-10-050-902-348
3	193	100.0	117	14	US-10-050-902-348
4	193	100.0	124	14	US-10-050-902-324
5	193	100.0	124	14	US-10-050-902-324
6	193	100.0	124	14	US-10-050-902-324
7	193	100.0	141	16	US-10-612-356A-1
8	193	100.0	162	9	US-09-745-003-10
9	193	100.0	163	14	US-10-104-047-2013
10	193	100.0	164	9	US-09-745-003-12
11	193	100.0	200	16	US-10-470-848-10
12	193	100.0	208	16	US-10-470-848-3
13	193	100.0	208	17	US-10-745-393-1

ALIGNMENTS

14	193	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	193	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	193	100.0	225	15	US-10-301-488A-25	Sequence 25, Appl1
17	193	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	193	100.0	226	14	US-10-205-194-121	Sequence 121, Appl1
19	193	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	193	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	193	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	193	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	193	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	193	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	193	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
26	193	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	193	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	193	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	193	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	193	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	193	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	193	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	193	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	193	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	193	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	193	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	193	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	193	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	193	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	193	100.0	253	14	US-10-304-630-19	Sequence 19, Appl1
41	193	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	193	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	193	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	193	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	193	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175230A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 36
Db 52 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 87

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plossel, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Steudtner, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match
Best Local Similarity 100.0%; Score 193; DB 14; Length 117;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 36
Db 52 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 87

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
PRIOR FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match
Best Local Similarity 100.0%; Score 193; DB 14; Length 117;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 36
Db 52 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 87

RESULT 4

US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plossel, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrP construct
US-10-050-902-324

Query Match
Best Local Similarity 100.0%; Score 193; DB 14; Length 124;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 36
Db 53 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 88

RESULT 5

US-10-050-898-324
Sequence 324, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin

APPLICANT: Tisec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.019005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrp
US-10-050-898-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
Db 53 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.029003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/336,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrp
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
Db 53 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Luths, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
Db 84 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PEP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
Db 82 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMR 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: H1-A0105

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; CURRENT APPLICATION NUMBER: US/10/104,047
; CURRENT FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2013
; LENGTH: 163
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match
Best Local Similarity 100.0%; Score 193; DB 14; Length 163;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
DB 83 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 118

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: P-P2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match
Best Local Similarity 100.0%; Score 193; DB 9; Length 164;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
DB 82 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 117

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match
Best Local Similarity 100.0%; Score 193; DB 16; Length 200;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 186

RESULT 14
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match
Best Local Similarity 100.0%; Score 193; DB 16; Length 208;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 186

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Raetz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Schaarschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 0115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match
Best Local Similarity 100.0%; Score 193; DB 17; Length 208;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 186
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US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-6

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
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Db      151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 186

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
      |||||||
Db      151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 186

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Job time : 42.6098 secs
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OM protein - protein search, using sw model

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(without alignments)
216.658 Million cell updates/sec

Title: us-10-031-975-1_copy_179_218

Perfect score: 211
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Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

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5: geneseqp2002s:.*
6: geneseqp2003as:.*
7: geneseqp2003bs:.*
8: geneseqp2004s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	ABG94357	ABG94357 Modified
2	211	100.0	117	ABG80669	ABG80669 Human pri
3	211	100.0	117	ADD24196	ADD24196 Modified
4	211	100.0	124	ABG94340	ABG94340 Mouse mpr
5	211	100.0	124	ABG80652	ABG80652 Mouse tru
6	211	100.0	124	ADD24200	ADD24200 mpr-pr-EK-
7	211	100.0	142	AAW17686	AAW17686 Prion pro
8	211	100.0	163	ADB63859	ADB63859 Human pro
9	211	100.0	200	ABG31907	ABG31907 Human pri
10	211	100.0	208	AAW07316	AAW07316 Mouse pri
11	211	100.0	208	AAW07318	AAW07318 Human pri
12	211	100.0	208	AAW07327	AAW07327 Mouse pri
13	211	100.0	208	AAW07329	AAW07329 Human pri
14	211	100.0	208	ABG31902	ABG31902 Human pri
15	211	100.0	208	ABG31904	ABG31904 Chimera-t
16	211	100.0	208	ADJ66133	ADJ66133 Mouse pri
17	211	100.0	209	ABG31905	ABG31905 HCNV type
18	211	100.0	211	AAW30801	AAW30801 amino aci
19	211	100.0	225	ABR42793	ABR42793 Rat prion
20	211	100.0	226	ADB85240	ADB85240 Rat prion
21	211	100.0	245	AAW72342	AAW72342 Monkey pr
22	211	100.0	245	AAW72352	AAW72352 Cercopit
23	211	100.0	253	AAW86715	AAW86715 Human pri
24	211	100.0	253	AAW69660	AAW69660 Human pri
25	211	100.0	253	AAW85901	AAW85901 Human pri

26	211	100.0	253	AAW07994	AAW07994 Human pri
27	211	100.0	253	AAW81485	AAW81485 Human pri
28	211	100.0	253	AAW06272	AAW06272 Human pri
29	211	100.0	253	AAW15035	AAW15035 Human pri
30	211	100.0	253	AAW72339	AAW72339 Chimpanze
31	211	100.0	253	AAW72347	AAW72347 Prion pro
32	211	100.0	253	AAW72353	AAW72353 Guereza p
33	211	100.0	253	AAW72344	AAW72344 Rhesus mo
34	211	100.0	253	AAW72345	AAW72345 Gibbon pr
35	211	100.0	253	AAW72350	AAW72350 Marmoset
36	211	100.0	253	AAW72351	AAW72351 Hamadryas
37	211	100.0	253	AAW72348	AAW72348 Prion pro
38	211	100.0	253	AAW72356	AAW72356 Slamang p
39	211	100.0	253	AAW72346	AAW72346 Prion pro
40	211	100.0	253	AAW72355	AAW72355 Prion pro
41	211	100.0	253	AAW72349	AAW72349 Prion pro
42	211	100.0	253	AAW72340	AAW72340 Orangutan
43	211	100.0	253	AAW72338	AAW72338 Human pri
44	211	100.0	253	AAW72354	AAW72354 Capuchin
45	211	100.0	253	AAW72341	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE .Modified human prion protein fragment.
XX
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002MO-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner MA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
FI Ploesek C;
XX WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX
CC This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide

(Abeta1-42) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and the repetitive antigen array. The invention also comprises a coat protein having an amino acid sequence selected from five amino acid sequences fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytostatic, CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in CC immunisation and as a vaccine. The present sequence represents a protein CC sequence used to create the compositions of the invention

SO Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNITIKOHTVTTTCKGNETETDVKMERVVEQ 40
52 NNFVHDCVNITIKOHTVTTTCKGNETETDVKMERVVEQ 91

RESULT 2

ABG80669
ID ABG80669 standard; protein; 117 AA.
XX ABG80669;
AC
XX
XX 29-NOV-2002 (first entry)

Human prion protein/cysteine-containing peptide fusion protein.
XX

Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mulein;
XX adult versus host disease; Ige-mediated allergic reaction; anaphylaxis;
XX allergic asthma; acute lymphoblastic leukaemia; Crohn's disease;
XX Grave's disease; systemic lupus erythematosus; osteoporosis;
XX inflammatory immune disease; myasthenia gravis; multiple sclerosis;
XX immunoproliferative disease lymphadenopathy; Alzheimer's disease;
XX angioimmunoproliferative lymphadenopathy; Alzheimer's disease;
XX rheumatoid arthritis; diabetes; infectious disease; lymphadenopathy;
XX enterokinase; cysteine-containing linker.

OS Homo sapiens.
XX Synthetic.
XX

W0200256907-A2.

25-JUL-2002.

21-JAN-2002; 2002WO-IB000168.

PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0286549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX (NOV) NOVARTIS PHARMA AG.

XX (MAUR) MAURER P.
XX (LECH) LECHNER F.

XX (ORTM) ORTMANN R.
XX (LUBO) LUBOEND R.
XX (STAU) STAUFENBIEL M.

XX (FREY) FREY P.
XX

PI Maurer P., Lechner F., Ortman R., Lueoend R., Staufenbiel M., Frey P;

PI Renner WA, Bachmann M, Tissot A, Seibel P, Plosek C;
XX WPI; 2002-636514/68.
XX

PT Molecular antigen array used in the production of vaccines for infectious
XX diseases.

PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
XX molecular scaffold comprising: (1) a core particle selected from: (1) a
XX core particle of a non-natural origin; and (2) a core particle of natural
XX origin; and (11) an organism comprising at least one first attachment
XX site, where the organism is connected to the core particle by at least
XX one second attachment site, where the antigen or antigenic determinant is
XX attached to the second attachment site; and (12) a fragment, and where the second
XX attachment site is selected from: (1) an attachment site not naturally
XX occurring with the antigen or antigenic determinant; and (11) an
XX attachment site naturally occurring with the antigen or antigenic
XX determinant, where the second attachment site is capable of association
XX through at least one non-peptide bond to the first attachment site; and
XX where the antigen or antigenic determinant and the scaffold interact
XX through the association to form an ordered and repetitive antigen array.
XX Also included is a process for producing a non-naturally occurring
XX ordered and repetitive antigen array. The composition is used in
XX immunisation and as a vaccine for diseases such as influenza, graft
XX versus host disease, Ige-mediated allergic reactions, anaphylaxis, adult
XX acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
XX systemic lupus erythematosus, inflammatory immune diseases, myasthenia
XX gravis, immunoproliferative disease lymphadenopathy,
XX angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
XX rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
XX osteoporosis and infectious diseases. The present sequence is a modified
XX antigen for use in the array of the invention. The antigen is modified to
XX possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
XX containing N- or C-terminal linker peptide which serves as the attachment
XX point to a virus like particle or bacterial protein (the scaffold
XX protein)

SO Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTCKGNETETDVKMERVVEQ 40
Db 52 NNFVHDCVNITIKOHTVTTTCKGNETETDVKMERVVEQ 91

RESULT 3

ADD24196
ID ADD24196 standard; protein; 117 AA.
XX

AC ADD24196;
XX

DT 15-JAN-2004 (first entry)
XX

DE Modified human prion protein amino acid sequence.
XX

XX vaccine composition; virus-like particle; core particle;
XX first attachment site; antigen; antigenic determinant; prion protein;
XX PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
XX prion disease; Bovine Spongiform Encephalopathy; BSE;
XX Creutzfeldt-Jakob Disease; prion; mutant; mulein.

XX Synthetic.
XX

OS prion.
XX

PN W02003059386-A2.
XX

PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 211; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKMERVVEQ 40
 DB 52 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKMERVVEQ 91
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 OS WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000166.
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 PI Piossek C;
 XX
 DR WPI; 2002-627351/67.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 438; 441pp; English.
 XX
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β hexa coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytosolic, used in
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKMERVVEQ 40
 DB 53 NNFVHDCVNTTIKQHTVTTTKGENFTETDVKMERVVEQ 92
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 KM Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β 1-42; influenza; mutagen;
 KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; AIDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 OS Synthetic.
 OS

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Piossek C,
 XX WPI: 2002-636514/68.
 DR
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7; Page 415; 418pp; English.
 CC
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an antigen or antigenic determinant with at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (A-beta 1-42) or its fragment; and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant; where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC immunization and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC systemic lupus erythematosus, non-Hodgkin's lymphoma, Grave's disease,
 CC gravis, immunoproliferative disease lymphadenopathy, myasthenia
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (antigenase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 CC
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHCVNITIKOHTVTTTNGENFTETDVMMERVVEQ 40
 DB 53 NNFFVHCVNITIKOHTVTTTNGENFTETDVMMERVVEQ 92

RESULT 6
 ID ADD24200
 XX ADD24200 standard; protein; 124 AA.
 AC
 XX ADD24200;
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrPt-EK-Fc* cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW Creutzfeldt-Jakob Disease; prion; mPrPt-EK-Fc*.
 XX
 OS Unidentified.
 OS prion.
 XX
 PN WO2003059386-A2.
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA,
 XX WPI: 2003-598483/56.
 DR
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 CC
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
 CC which was used during the exemplification of the invention.
 CC
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHCVNITIKOHTVTTTNGENFTETDVMMERVVEQ 40
 DB 53 NNFFVHCVNITIKOHTVTTTNGENFTETDVMMERVVEQ 92
 RESULT 7
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX

DT 14-JUN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jacob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 PN MO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96MO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PS
 XX Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jacob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX
 SQ Sequence 142 AA;
 Query Match 100.0%; Score 211; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 1.7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTR020055570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Isegai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
 PI Seki N, Yoshikawa T, Otsuka M, Nagahara K, Masuno Y;
 XX
 DR WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS
 XX Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 CC
 XX
 SQ Sequence 163 AA;
 Query Match 100.0%; Score 211; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 2e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related peptide #6.
 XX
 KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200261418-A1.
 XX
 PD 08-AUG-2002.
 XX

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XX 31-JAN-2002; 2002WO-JP000803.
PF 31-JAN-2001; 2001JP-00024279.
PR (TOHO ) UNIV TOHOKU.
XX
XX Kltamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention.
XX
XX Sequence 200 AA;
SQ
XX
XX Query Match 100.0%; Score 211; DB 5; Length 200;
XX Best Local Similarity 100.0%; Pred. No. 2.5e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
XX 143 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 182
XX
XX RESULT 10
XX AAB07316
XX ID AAB07316 standard; protein; 208 AA.
XX AC AAB07316;
XX XX
XX 17-OCT-2000 (first entry)
XX DE Mouse prion protein sequence.
XX XX
XX Mouse; prion protein; transmissible spongiform encephalopathy;
XX KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX OS Mus sp.
XX XX
XX Key Location/Qualifiers
XX PH 37..68
XX FT /note="Repeat region consisting of tandem repeats of
XX FT Disulfide-bond 158..191
XX FT Modified-site 208
XX FT /note="C-terminal phospho-inositol glycolipid membrane
XX FT anchor (-GPI)"
XX PN MO200029850-A1.
XX PD 25-MAY-2000.
XX XX
XX 27-OCT-1999; 99WO-FI000897.
XX PF 17-NOV-1998; 98FI-00002481.
XX PR (WALL-) WALLAC OY.
XX XX (BBSR-) BBSRC OFFICE.
XX PA
XX (BBSR-) BBSRC OFFICE.

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XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of transmissible
XX spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
XX
XX Sequence 208 AA;
SQ
XX
XX Query Match 100.0%; Score 211; DB 3; Length 208;
XX Best Local Similarity 100.0%; Pred. No. 2.6e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 40
XX 150 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQ 189
XX
XX RESULT 11
XX AAB07318
XX ID AAB07318 standard; protein; 208 AA.
XX AC AAB07318;
XX XX
XX 17-OCT-2000 (first entry)
XX DE Human prion protein sequence.
XX XX
XX Human; prion protein; transmissible spongiform encephalopathy;
XX KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX OS Homo sapiens.
XX XX
XX Key Location/Qualifiers
XX PH 29..69
XX FT /note="Repeat region consisting of tandem repeats of
XX FT Disulfide-bond 157..192
XX FT Modified-site 208
XX FT /note="C-terminal phospho-inositol glycolipid membrane
XX FT anchor (-GPI)"
XX PN MO200029850-A1.
XX PD 25-MAY-2000.
XX XX
XX 27-OCT-1999; 99WO-FI000897.
XX PF 17-NOV-1998; 98FI-00002481.
XX PR (WALL-) WALLAC OY.
XX XX (BBSR-) BBSRC OFFICE.
XX PA
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of

```

PT transmissible spongiform encephalopathies in bovines.
 XX Disclosure; Page 43-44; 50pp; English.
 PS
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 QY
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 151 NNFVHDCVNIITIKQHTVTTTGGNFETEDVKKMERVVEQ 190
 1 NNFVHDCVNIITIKQHTVTTTGGNFETEDVKKMERVVEQ 40
 |||||
 RESULT 12
 AAB07327
 ID AAB07327 standard; protein; 208 AA.
 AC AAB07327;
 XX
 DT 17-OCT-2000 (first entry)
 DE Mouse prion protein sequence.
 XX
 XX Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Mus sp.
 FH Key Location/Qualifiers
 FT Region /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 XX
 PN W0200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 XX New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 PS Disclosure; Page 41-42; 50pp; English.
 CC The present sequence is the mouse prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 QY
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 150 NNFVHDCVNIITIKQHTVTTTGGNFETEDVKKMERVVEQ 189
 1 NNFVHDCVNIITIKQHTVTTTGGNFETEDVKKMERVVEQ 40
 |||||
 RESULT 13
 AAB07329
 ID AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 XX
 DT 17-OCT-2000 (first entry)
 DE Human prion protein sequence.
 XX
 XX Human; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT Region /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 XX
 PN W0200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 XX New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 PS Disclosure; Page 43-44; 50pp; English.
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SO Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFHDCVNTTIKQHTVTTTGGNFETEDVGMERVVEQ 40
 DB 151 NNPFHDCVNTTIKQHTVTTTGGNFETEDVGMERVVEQ 190

RESULT 14

ABG31902
 ID ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KM Prion; human; follicular dendritic cells; FDC; infection;

KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX

SO Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFHDCVNTTIKQHTVTTTGGNFETEDVGMERVVEQ 40
 DB 151 NNPFHDCVNTTIKQHTVTTTGGNFETEDVGMERVVEQ 190

RESULT 15

ABG31904

ID ABG31904 standard; protein; 208 AA.

AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimera-type prion protein #2.

KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimera type prion related protein of the
 CC invention
 XX

SO Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFHDCVNTTIKQHTVTTTGGNFETEDVGMERVVEQ 40
 DB 151 NNPFHDCVNTTIKQHTVTTTGGNFETEDVGMERVVEQ 190

Search completed: December 3, 2004, 00:55:36
 Job time : 67.2295 secs

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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	226	2 A53892	p1on-related prot
2	211	100.0	232	2 S71041	major p1on protei
3	211	100.0	241	2 S71048	major p1on protei
4	211	100.0	241	2 S71056	major p1on protei
5	211	100.0	245	2 S71045	major p1on protei
6	211	100.0	253	1 UTHU	major p1on protei
7	211	100.0	253	1 I84423	major p1on protei
8	211	100.0	253	2 S71055	major p1on protei
9	211	100.0	253	2 S53635	p1on protein - si
10	211	100.0	253	2 I37032	major p1on protei
11	211	100.0	253	2 I61847	major p1on protei
12	211	100.0	254	2 B34759	p1on protein - ch
13	211	100.0	254	2 A34759	p1on protein - G
14	211	100.0	254	2 A33544	major p1on protei
15	210	99.5	252	2 I18488	major p1on protei
16	209	99.1	264	2 S71137	p1on protein - gr
17	206	97.6	245	2 S53627	major p1on protei
18	206	97.6	252	2 S53634	major p1on protei
19	206	97.6	252	2 S53631	major p1on protei
20	206	97.6	253	2 S53624	major p1on protei
21	206	97.6	253	2 S53620	major p1on protei
22	206	97.6	253	2 S53620	major p1on protei
23	206	97.6	253	2 S53625	major p1on protei
24	206	97.6	253	2 S53617	major p1on protei
25	206	97.6	253	2 S53614	major p1on protei
26	206	97.6	253	2 S53616	major p1on protei
27	206	97.6	253	2 S53618	major p1on protei
28	206	97.6	253	2 S53619	major p1on protei
29	206	97.6	254	1 UH4YIH	major p1on prp-Sc

30	206	97.6	256	2 JU0268	major p1on protei
31	206	97.6	257	2 A23545	major p1on prp27-
32	206	97.6	264	2 A54330	major p1on protei
33	205	97.2	256	2 S37149	p1on protein - go
34	205	97.2	256	2 A54281	major p1on protei
35	205	97.2	260	2 S53629	major p1on protei
36	203	96.2	257	2 JU1900	major p1on protei
37	202	95.7	239	2 S53633	major p1on protei
38	200	94.8	252	2 JUC175	p1on protein - ra
39	61	28.9	267	1 UCH	major p1on protei
40	61	28.9	267	2 A37372	p1on protein homo
41	61	28.9	273	2 A46280	p1on protein - ch
42	58	27.5	139	2 H90004	hypothetical prote
43	57	27.0	853	2 T08162	amylopullulanase (
44	56	26.5	511	2 C69199	phenylalanine-tRNA
45	55	26.1	648	2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1

A53892

p1on-related protein - rat (fragment)

C/Species: Rattus norvegicus (Norway rat)

C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A/Title: Cloning of rat "p1on-related protein" cDNA.

A/Reference number: A53892; PMID:88037055; PMID:2889648

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LIA>

A/Cross-references: UNIPROT:PI3852; GB:M20313; NID:g206391; PIDN:AAA41947.1; PID:g206392

C/Superfamily: major p1on protein

Query Match

Best Local Similarity 100.0%; Score 211; DB 2; Length 226;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY

1 NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMERVVEQ 40

DB 145 NNFVHDCVNITIKQHTVTTTGGNFTEIDVKMERVVEQ 184

RESULT 2

major p1on protein - black-handed spider monkey (fragment)

C/Species: Ateles geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:g474376; PIDN:AC50097.1; PID:g47437

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: P1on protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53630

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-221 <SCW>

A/Cross-references: EMBL:U08309

C/Superfamily: major p1on protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; p1on; scrapie

Query Match

100.0%; Score 211; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 8.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40

Db 157 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 196

RESULT 3

S71048

major prion protein - Calliobus moloch (fragment)
C/Species: Calliobus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

A/Accession: S71048; S53632
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PID:AA050100.1; PID:G4755

J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53632
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-203 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40

Db 166 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 205

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

A/Accession: S71056; S53621
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PID:AA050091.1; PID:G4743

J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-203 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40

Db 166 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 205

RESULT 5

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

A/Accession: S71045; S53628
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PID:AA050081.1; PID:G47

J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 8-10 'L', 12-202 'R', 204-239 <SCW>

A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match Best Local Similarity 100.0%; Score 211; DB 2; Length 245;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40

Db 165 NNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 6

U08U

major prion protein precursor - human
N/Alternate names: 11k amyloid protein; 27-30kialoglycoprotein; PrP 27-30; PrP 33-35C;
C/Species: Homo sapiens (man)
C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

A/Accession: A24173; A40372; A05017; S14078; I54322; I68597; I59184; I79633; I79

DNA 5, 315-324, 1986
A/Title: Molecular cloning of a human prion protein cDNA.

A/Reference number: A24173; MUID:86300093; PMID:3755672

A/Accession: A24173
A/Molecule type: mRNA

A/Residues: 1-253 <KRE>

A/Cross-references: UNIPROT:P04156; GB:M13899; NID:G190467; PID:AAA60182.1; PID:G190468

Am. J. Hum. Genet. 49, 320-329, 1991
A/Title: Genomic structure of the human prion protein gene.

A/Reference number: A40372; MUID:91328137; PMID:1678248

A/Accession: A40372
A/Status: not compared with conceptual translation

A/Molecule type: DNA
A/Residues: 1-80, 89-253 <PUC>

A/Cross-references: GB:X83416; NID:G747846; PID:CAA58442.1; PID:G747847

A/Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be

Science 233, 364-367, 1986
A/Reference number: A05017; MUID:86261778; PMID:3014653

A/Accession: A05017
A/Molecule type: mRNA
A/Residues: 8-117, 119-253 <LTA>

A/Cross-references: GB:D00015; NID:G220015; PID:BAA00011.1; PID:G220016; GB:M13667; NID:

EMBO J. 10, 513-519, 1991
A/Title: Amyloid protein of Gerstmann-Strausner-Scheiner disease (Indiana kindred) 18

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615
A/Status: nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:g474374; PIDN:AA650096.1; PID:g4743
A/Note: the source was designated as *Symphalangus syndactylus*
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 212

RESULT 10

major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
R/Accession: I37032
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:g563208; PIDN:AA68633.1; PID:g5632
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 212

RESULT 11

major prion protein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
R/Accession: I61847; S71060; S53615
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I61847
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:g609303; PIDN:AA68632.1; PID:g6093
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A/Accession: S71041

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 212

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210; R, 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 212

RESULT 12

prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
R/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropatholo-
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:g191182; PIDN:AA37014.1; PID:g191183
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 212

RESULT 13

prion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
R/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:Q60506; GB:M33958; NID:g191180; PIDN:AA37013.1; PID:g387056
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 173 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 212

RESULT 14

major prion protein precursor - mouse
N/Alternate names: PrP; Scrapie prion
C/Species: Mus musculus (house mouse)

C>Date: 22-Jul-1987 #sequence revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; S02521; A22315

R/Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; MUID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <RES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529

A/Experimental source: strains NZW and I/Lmd

A/Note: the sequence shown is from the NZW strain; the sequence from the I/Lmd strain di

R/Loch, C.; Cheesbro, B.; Race, R.; Ketch, J.M.

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a

A/Reference number: S02521; MUID:8816695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Cheesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u

A/Reference number: A22315; MUID:85213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHE>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <SIG>

F/23-231/Product: major prion protein #status predicted <MAT>

F/232-254/Domain: carboxyl-terminal propetide #status predicted <CTP>

F/178-213/Disulfide bonds: #status predicted

F/180,196/Binding site: carboxydrate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (1n mature form

Query Match 100.0%; Score 211; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 9.7e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 211

RESULT 15

161848 major prion protein precursor - common squirrel monkey

C/Species: Samitri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: 161848

R/Cervanokova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental t

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 161848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G5595852; PIDN:AAA68636.1; PID:G5958

C/Superfamily: major prion protein

Query Match 99.5%; Score 210; DB 2; Length 252;

Best Local Similarity 97.5%; Pred. No. 1.3e-19;

Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 211

Db 172 NNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQ 211

Search completed: December 3, 2004, 00:38:37
Job time: 12 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNTTKQHTVTTTKGENTFEDVKMERVQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt 02.*
1: UniProt_sprot.*
2: UniProt_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	232	1	P40246 atelae geof
2	211	100.0	238	1	P40246 atelae geof
3	211	100.0	238	1	P40246 atelae geof
4	211	100.0	238	1	P40246 atelae geof
5	211	100.0	240	2	P40246 atelae geof
6	211	100.0	241	1	P40246 atelae geof
7	211	100.0	241	1	P40246 atelae geof
8	211	100.0	245	1	P40246 atelae geof
9	211	100.0	246	1	P40246 atelae geof
10	211	100.0	246	1	P40246 atelae geof
11	211	100.0	246	1	P40246 atelae geof
12	211	100.0	246	1	P40246 atelae geof
13	211	100.0	246	2	P40246 atelae geof
14	211	100.0	248	2	P40246 atelae geof
15	211	100.0	252	1	P40246 atelae geof
16	211	100.0	252	1	P40246 atelae geof
17	211	100.0	253	1	P40246 atelae geof
18	211	100.0	253	1	P40246 atelae geof
19	211	100.0	253	1	P40246 atelae geof
20	211	100.0	253	1	P40246 atelae geof
21	211	100.0	253	1	P40246 atelae geof
22	211	100.0	253	1	P40246 atelae geof
23	211	100.0	253	1	P40246 atelae geof
24	211	100.0	253	1	P40246 atelae geof
25	211	100.0	253	1	P40246 atelae geof
26	211	100.0	253	2	P40246 atelae geof
27	211	100.0	253	2	P40246 atelae geof
28	211	100.0	253	2	P40246 atelae geof
29	211	100.0	253	2	P40246 atelae geof
30	211	100.0	253	2	P40246 atelae geof
31	211	100.0	254	1	P40246 atelae geof

32	211	100.0	254	1	P40246 atelae geof
33	211	100.0	254	1	P40246 atelae geof
34	211	100.0	254	1	P40246 atelae geof
35	211	100.0	254	1	P40246 atelae geof
36	211	100.0	254	2	P40246 atelae geof
37	211	100.0	254	2	P40246 atelae geof
38	211	100.0	254	2	P40246 atelae geof
39	211	100.0	277	2	P40246 atelae geof
40	211	100.0	277	2	P40246 atelae geof
41	211	100.0	285	2	P40246 atelae geof
42	210	99.5	220	2	P40246 atelae geof
43	210	99.5	248	2	P40246 atelae geof
44	210	99.5	260	1	P40246 atelae geof
45	209	99.1	215	2	P40246 atelae geof

ALIGNMENTS

RESULT 1
ID P40246; STANDARD; PRT; 232 AA.
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrP;
OS Ateles Geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler Syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL: U08309; AAC50097.1; -
CC PIR: S71041; S71041.
CC HSSP: P23907; 1G04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF00391; Prion; 1.
CC Pfam: PF00341; Prion.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON_TER 1
CC SIGNAL 15
CC CHAIN <1 214
CC PROPEP 215
CC FT 214
CC LIPID 214
CC
CC By similarity.
CC Major prion protein.
CC Removed in mature form (By similarity).
CC GPI-anchor amidated serine (By

```

FT FT DISULFID 163 198 similarity.
FT FT CARBOHYD 165 165 By similarity.
FT FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
FT FT DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
FT FT REPEAT 44 51 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT FT REPEAT 52 59 0.
FT FT REPEAT 60 67 1.
FT FT REPEAT 68 75 2.
FT FT NON TER 232 232 3.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 1; Length 232;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 157 NNFFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQ 196

OY 1 NNFFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQ 40

RESULT 2
PRIO_CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecidae;
OC NCBI_Taxid=95622, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC "rods".
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion.1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; Prion_1; 1.
CC PROSITE; PS00706; Prion_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW

FT FT NON TER 1 1
FT FT SIGNAL <1 15 By similarity.
FT FT CHAIN 16 215 Major prion protein.
FT FT PROPEP 216 238 Removed in mature form (By similarity).
FT FT LIPID 215 215 GPI-anchor amidated serine (By
FT FT DISULFID 164 199 similarity).
FT FT CARBOHYD 166 166 By similarity.
FT FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT FT REPEAT 44 52 0.
FT FT REPEAT 53 60 1.
FT FT REPEAT 61 68 2.
FT FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EBC3E3531B CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 1; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 158 NNFFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQ 197

OY 1 NNFFVHDCVNTITIKOHTVTTTGGNFETTDVKMERVVEQ 40

RESULT 3
PRIO_THGE STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP; Synonyms=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OC NCBI_Taxid=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC "-1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion.1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; Prion_1; 1.
CC PROSITE; PS00706; Prion_2; 1.

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 >238 Removed in mature form (By similarity).
FT DISULFID 164 199 By similarity.
FT LIPID 215 215 GPI-anchor amidated serine (By similarity).
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 197

RESULT 4
Q86XR1 PRELIMINARY; PRT; 238 AA.
AC Q86XR1;
DT 01-JUN-2003 (TREMBLrel. 24, Created)
DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AA083635.1; -
DR InterPro; IPR00817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PRO0341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match 100.0%; Score 211; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 197

RESULT 5
Q8VHV4 PRELIMINARY; PRT; 240 AA.
AC Q8VHV4;

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DT 01-MAR-2002 (TREMBLrel. 20, Created)
DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretzschmar H.A., Wolter D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PRO0341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4BD3F5F76693 CRC64;

Query Match 100.0%; Score 211; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 204

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callithecus moloch (Dukey titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callithecinae;
OC Callithecus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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DR EMBL: U08312; AAC50100.1; -
DR PIR: S71048; S71048.
DR HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03377; Prion. 1.
DR PRINTS: PR00341; Prion. 6.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.

FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT DISULFID 172 207 By similarity.
FT LIPID 223 223 GPI-anchor amidated serine (By
similarity).
FT CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
O.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3,7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 166 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 205

RESULT 7
PRIO MANSP STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Mandillus sphinx (Mandill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Mandillius.
OX NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL: U08303; AAC50091.1; -
DR PIR: S71056; S71056.
DR HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03377; Prion. 1.
DR PRINTS: PR00341; Prion. 6.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW NON_TER 1 1
KW SIGNAL <1 15 By similarity.
KW CHAIN 16 223 Major prion protein.
KW PROPEP 224 >241 Removed in mature form (By similarity).
KW LIPID 223 223 GPI-anchor amidated serine (By
similarity).
KW DISULFID 172 207 By similarity.
KW CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
KW CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
KW DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
O.
KW REPEAT 44 52 1.
KW REPEAT 53 60 2.
KW REPEAT 61 68 3.
KW REPEAT 69 76 4.
KW REPEAT 77 84 5.
KW NON_TER 241 241
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3,7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 166 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 205

RESULT 8
PRIO CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Griwet), and
OS Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

```

CC      "rds".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC      EMBL: U08291; AAC5080.1; -.
CC      EMBL: U08292; AAC5081.1; -.
CC      PIR: S53627; S53627.
CC      PIR: S71045; S71045.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      SIGNAL 1 22
CC      CHAIN 23 222
CC      PROPEP 223 245
CC      LIPID 222 222
CC
CC      DISULFID 171 206
CC      CARBOHYD 173 173
CC      CARBOHYD 189 189
CC      DOMAIN 51 83
CC
CC      REPEAT 51 59
CC      REPEAT 60 67
CC      REPEAT 68 75
CC      REPEAT 76 83
CC      REPEAT 77 84
CC      SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;
CC
Query Match 100.0%; Score 211; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 9
 PRIO_CERMO STANDARD: PRT; 246 AA.
 AC P61761; Q95172; Q95173;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUN-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Pp27-30) (Pp33-35C) (Fragment).
 GN Name=Prnp;
 OS Cercopithecus mona (Mona monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCB1_TaxID=36226;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion.";

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC      "rds".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC
CC      This SWISS-PROT entry is copyright. It is produced through a collaboration
CC      between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC      the European Bioinformatics Institute. There are no restrictions on its
CC      use by non-profit institutions as long as its content is in no way
CC      modified and this statement is not removed. Usage by and for commercial
CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC
CC      EMBL: U75386; AAB50625.1; -.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      NON TER 1 1
CC      SIGNAL <1 15
CC      CHAIN 16 223
CC      PROPEP 224 246
CC      LIPID 223 223
CC
CC      DISULFID 172 207
CC      CARBOHYD 174 174
CC      CARBOHYD 190 190
CC      DOMAIN 44 84
CC
CC      REPEAT 44 52
CC      REPEAT 53 60
CC      REPEAT 61 68
CC      REPEAT 69 76
CC      REPEAT 77 84
CC      SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
CC
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 205

RESULT 10
 PRIO_CERNE STANDARD: PRT; 246 AA.
 AC P61762; Q95172; Q95173;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUN-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Pp27-30) (Pp33-35C) (Fragment).
 GN Name=Prnp;
 OS Cercopithecus neglectus (Debranza's monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCB1_TaxID=36227;
 RN [1]
 RP SEQUENCE FROM N.A.

RA van der Kuy1 A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases Kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation-
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL: U75387; AAB50626.1; -
 DR HSSP: P23907; IG04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT FT SIGNAL 1 15
 FT CHAIN <1 15
 FT PROPEP 16 223
 FT LIPID 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FD3 CRC64;
 Query Match
 Best Local Similarity 100.0%; Score 211; DB 1; Length 246;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 NNFVHDCVNIITKQHTVTTTNGENFTEDYKMERVVEQ 40
 DB 166 NNFVHDCVNIITKQHTVTTTNGENFTEDYKMERVVEQ 205
 RESULT 11
 ID Prio_CERTO STANDARD; PRT; 246 AA.
 AC 095176;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 05-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 GN Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 OS Cercopithecus torquatus alyx (Red-crowned mangabey) (Socot mangabey).
 OC Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
 GN Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 OS Cercopithecinae; Cercopithecidae.

OX NCBI:TaxID=9531;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuy1 A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases Kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL: U75385; AAB50628.1; -
 DR HSSP: P23907; IG04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS: PR00341; PRION.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 DR KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT FT SIGNAL 1 15
 FT CHAIN <1 15
 FT PROPEP 16 223
 FT LIPID 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26914 MW; F58679CBBEC5ADC7 CRC64;
 Query Match
 Best Local Similarity 100.0%; Score 211; DB 1; Length 246;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 NNFVHDCVNIITKQHTVTTTNGENFTEDYKMERVVEQ 40
 DB 166 NNFVHDCVNIITKQHTVTTTNGENFTEDYKMERVVEQ 205
 RESULT 12
 ID Prio_ERYPA STANDARD; PRT; 246 AA.
 AC 095174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 05-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 GN Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 OS Erythrocebus patas (Red guenon) (Cercopithecus patas).


```

DT 05-UTL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Pp27-30) (Pp33-35C).
GN Name=Prp;
OS Calitrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrix.
RN [1] TextID=9483;
RP
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL: U08304; AAC50092.1; -.
CC
CC DR HSBP, S53634; S53634.
CC DR HSBP, P23907; IG04.
CC DR InterPro: IPR000817; Prion.
CC DR Pfam: PF00377; Prion; 1.
CC DR PRINTS: PR00341; Prion; octapep; 6.
CC DR PROSITE: PS00281; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC FT SIGNAL 1 22 By similarity.
CC FT CHAIN 1 229 Major prion protein.
CC FT PROPEP 23 229 Removed in mature form (By similarity).
CC FT LIPID 229 229 GPI-anchor amidated serine (By
CC similarity).
CC FT DISULFID 178 213 By similarity.
CC FT CARBOHYD 180 180 N-linked (GLCNAC...) (Potential).
CC FT CARBOHYD 196 180 N-linked (GLCNAC...) (Potential).
CC FT DOMAIN 51 90 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC REPEAT 51 58 0.
CC FT REPEAT 59 66 1.
CC FT REPEAT 67 74 2.
CC FT REPEAT 75 82 3.
CC FT REPEAT 83 90 4.
CC FT REPEAT 83 90 5.
CC SQ SEQUENCE 252 AA; 27639 MW; B2800B60F5DC664 CRC64;

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Query Match 100.0%; Score 211; DB 1; Length 252;
 Best Local Similarity 100.0%; Pred. No. 3.9e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNIITKQHTVTTTNGENFTETDVKKMERVVEQ 40
 DB 172 NNFVHDCVNIITKQHTVTTTNGENFTETDVKKMERVVEQ 211

Search completed: December 3, 2004, 00:35:27
 Job time : 64.6557 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :

1: /cgn2_6/ptodata/1/iaa/5A.COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B.COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A.COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B.COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCTUS.COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	142	1	US-08-556-823-10 Sequence 10, Appl
2	211	100.0	245	4	US-09-431-887-5 Sequence 5, Appl
3	211	100.0	245	4	US-09-431-887-15 Sequence 15, Appl
4	211	100.0	252	4	US-09-431-887-13 Sequence 13, Appl
5	211	100.0	252	4	US-09-431-887-17 Sequence 17, Appl
6	211	100.0	253	1	US-08-242-188-2 Sequence 2, Appl
7	211	100.0	253	1	US-08-509-261A-2 Sequence 2, Appl
8	211	100.0	253	1	US-08-660-626-8 Sequence 8, Appl
9	211	100.0	253	1	US-08-692-892-2 Sequence 2, Appl
10	211	100.0	253	2	US-08-713-919A-2 Sequence 2, Appl
11	211	100.0	253	2	US-08-868-162A-22 Sequence 2, Appl
12	211	100.0	253	3	US-09-031-168-8 Sequence 8, Appl
13	211	100.0	253	3	US-09-128-450-20 Sequence 20, Appl
14	211	100.0	253	3	US-09-036-579-2 Sequence 2, Appl
15	211	100.0	253	3	US-09-823-494-20 Sequence 20, Appl
16	211	100.0	253	3	US-09-550-374-2 Sequence 2, Appl
17	211	100.0	253	4	US-09-431-887-1 Sequence 1, Appl
18	211	100.0	253	4	US-09-431-887-2 Sequence 2, Appl
19	211	100.0	253	4	US-09-431-887-3 Sequence 3, Appl
20	211	100.0	253	4	US-09-431-887-4 Sequence 4, Appl
21	211	100.0	253	4	US-09-431-887-7 Sequence 7, Appl
22	211	100.0	253	4	US-09-431-887-8 Sequence 8, Appl
23	211	100.0	253	4	US-09-431-887-9 Sequence 9, Appl
24	211	100.0	253	4	US-09-431-887-10 Sequence 10, Appl
25	211	100.0	253	4	US-09-431-887-11 Sequence 11, Appl
26	211	100.0	253	4	US-09-431-887-12 Sequence 12, Appl
27	211	100.0	253	4	US-09-431-887-14 Sequence 14, Appl

28	211	100.0	253	4	US-09-431-887-16 Sequence 16, Appl
29	211	100.0	253	4	US-09-431-887-18 Sequence 18, Appl
30	211	100.0	253	4	US-09-431-887-19 Sequence 19, Appl
31	211	100.0	253	4	US-09-943-906-2 Sequence 2, Appl
32	211	100.0	253	4	US-09-669-516C-8 Sequence 8, Appl
33	211	100.0	253	4	US-09-919-172-57 Sequence 57, Appl
34	211	100.0	253	4	US-09-976-594-72 Sequence 72, Appl
35	211	100.0	253	4	US-09-904-987-3 Sequence 3, Appl
36	211	100.0	254	1	US-08-242-188-1 Sequence 1, Appl
37	211	100.0	254	1	US-08-509-261A-1 Sequence 1, Appl
38	211	100.0	254	1	US-08-660-626-7 Sequence 7, Appl
39	211	100.0	254	1	US-08-692-892-1 Sequence 1, Appl
40	211	100.0	254	2	US-08-713-919A-1 Sequence 1, Appl
41	211	100.0	254	2	US-08-868-162A-21 Sequence 21, Appl
42	211	100.0	254	3	US-09-031-168-7 Sequence 7, Appl
43	211	100.0	254	3	US-09-128-450-19 Sequence 19, Appl
44	211	100.0	254	3	US-09-128-450-28 Sequence 28, Appl
45	211	100.0	254	3	US-09-036-579-1 Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823

Patent No. 5750361

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko

APPLICANT: Fred E. Cohen

TITLE OF INVENTION: Formation and use of prion protein

TITLE OF INVENTION: 10

NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Ascii

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/556, 823

FILING DATE:

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 142 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-556-823-10

Query Match 100.0%; Score 211; DB 1; Length 142;

Best Local Similarity 100.0%; Pred. No. 3.2e-22; Indels 0; Gaps 0;

Matches 40; Conservative 0; Mismatches 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
Db 84 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 123

RESULT 2

US-09-431-887-5
 ; Sequence 5, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus aethiops
 US-09-431-887-5

Query Match

Best Local Similarity 100.0%; Score 211; DB 4; Length 245;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 40
 DB 165 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 204

RESULT 3

US-09-431-887-15
 ; Sequence 15, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 15
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus diana
 US-09-431-887-15

Query Match 100.0%; Score 211; DB 4; Length 245;
 Best Local Similarity 100.0%; Pred. No. 6.2e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 40
 DB 165 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 204

RESULT 4

US-09-431-887-13
 ; Sequence 13, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 13
 ; LENGTH: 252
 ; TYPE: PRT
 ; ORGANISM: Callithrix sp.
 US-09-431-887-13

Query Match

Best Local Similarity 100.0%; Score 211; DB 4; Length 252;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 40
 DB 172 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 211

RESULT 5

US-09-431-887-17
 ; Sequence 17, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-Gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patentln Ver. 2.0
 ; SEQ ID NO 17
 ; LENGTH: 252
 ; TYPE: PRT
 ; ORGANISM: Cebus sp.
 US-09-431-887-17

Query Match 100.0%; Score 211; DB 4; Length 252;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 40
 DB 172 NNFFHDCVNITTKOHTVTTTGGNFETTDVKKMERVVEQ 211

RESULT 6

US-08-242-188-2
 ; Sequence 2, Application US/08242188
 ; Patent No. 5565186
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Telling, Glenn
 ; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Karl Bosicovic
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentln Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bobicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 212

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bobicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bobicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 212

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Accil
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMERVVEQ 212

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Tellins, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESS: Karl Bozicevic
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESS: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/0868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneo, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESS: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 212

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: AsciII

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168

FILING DATE:
CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626

FILING DATE:
ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:

LENGTH: 253 amino acids
TYPE: amino acid

STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: peptide
ORIGINAL SOURCE:

ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149

GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suelette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03

CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253

TYPE: PRT

ORGANISM: Homo sapiens

US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 212

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony

APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road

CITY: Menlo Park
STATE: CA

COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM compatible
OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/036,579
FILING DATE:

CLASSIFICATION:
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875

TELEX:
INFORMATION FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids

TYPE: amino acid
STRANDEDNESS: single

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMERVEQ 212

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match
Best Local Similarity 100.0%; Score 211; DB 3; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVEQ 212

RESULT 15

US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suzele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match
Best Local Similarity 100.0%; Score 211; DB 3; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVEQ 212

Search completed: December 3, 2004, 00:18:54
Job time : 15.1475 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(Without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-1_COPY_179_218

Perfect score: 211
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Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
- 2: /cgn2_6/ptodata/1/pubpaa/PCF_NEW_PUB.pep:*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
- 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*
- 6: /cgn2_6/ptodata/1/pubpaa/PCFUS_PUBCOMB.pep:*
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- 11: /cgn2_6/ptodata/1/pubpaa/US09C_PUBCOMB.pep:*
- 12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
- 13: /cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
- 14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
- 15: /cgn2_6/ptodata/1/pubpaa/US10C_PUBCOMB.pep:*
- 16: /cgn2_6/ptodata/1/pubpaa/US10D_PUBCOMB.pep:*
- 17: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep:*
- 18: /cgn2_6/ptodata/1/pubpaa/US11_NEW_PUB.pep:*
- 19: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep:*
- 20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	14	US-10-050-902-348
2	211	100.0	117	14	US-10-050-898-348
3	211	100.0	117	14	US-10-346-190-89
4	211	100.0	124	14	US-10-050-902-324
5	211	100.0	124	14	US-10-050-898-324
6	211	100.0	124	14	US-10-346-190-93
7	211	100.0	141	16	US-10-612-356A-1
8	211	100.0	162	9	US-09-745-003-10
9	211	100.0	163	14	US-10-104-047-2013
10	211	100.0	164	9	US-09-745-003-12
11	211	100.0	200	16	US-10-470-848-10
12	211	100.0	208	16	US-10-470-848-3
13	211	100.0	208	17	US-10-745-393-1

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	211	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl1
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	211	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	211	100.0	253	9	US-09-804-987-3	Sequence 3, Appl1
25	211	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	211	100.0	253	14	US-10-301-488A-19	Sequence 19, Appl1
41	211	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	211	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	211	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	211	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	211	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

ALIGNMENTS

RESULT 1

US-10-050-902-348

Sequence 348, Application US/10050902

Publication No. US20030175290A1

GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.

APPLICANT: Bachmann, Martin

APPLICANT: Tissot, Alain

APPLICANT: Maurer, Patrick

APPLICANT: Lechner, Franziska

APPLICANT: Seibel, Peter

APPLICANT: Ploesek, Christine

TITLE OF INVENTION: Molecular Antigen Array

FILE REFERENCE: 1700.0190004

CURRENT APPLICATION NUMBER: US/10/050,902

CURRENT FILING DATE: 2002-01-18

PRIOR APPLICATION NUMBER: US 60/262,379

PRIOR FILING DATE: 2001-01-19

PRIOR APPLICATION NUMBER: US 60/286,549

PRIOR FILING DATE: 2001-05-04

PRIOR APPLICATION NUMBER: US 60/326,998

PRIOR FILING DATE: 2001-10-05

PRIOR APPLICATION NUMBER: US 60/331,045

PRIOR FILING DATE: 2001-11-07

NUMBER OF SEQ ID NOS: 350

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 348

LENGTH: 117

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Modified human prion protein fragment

US-10-050-902-348

Query Match

Best Local Similarity

100.0%; Score 211; DB 14; Length 117;
100.0%; Pred. No. 4,9e-21;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
 Db 52 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 91

RESULT 2

US-10-050-898-348
 ; Sequence 348, Application US/10050898
 ; Publication No. US20030175711A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Tisoc, Alain
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Lechner, Franziska
 ; APPLICANT: Sebhel, Peter
 ; APPLICANT: Ploesek, Christine
 ; APPLICANT: Ottmann, Rainer
 ; APPLICANT: Luond, Rainer
 ; APPLICANT: Staufenbiel, Matthias
 ; APPLICANT: Frey, Peter
 ; TITLE OF INVENTION: Molecular Antigen Array
 ; FILE REFERENCE: 1700.0190005
 ; CURRENT APPLICATION NUMBER: US/10/050, 898
 ; PRIOR FILING DATE: 2002-01-18
 ; PRIOR APPLICATION NUMBER: US 60/262,379
 ; PRIOR FILING DATE: 2001-01-19
 ; PRIOR APPLICATION NUMBER: US 60/288,549
 ; PRIOR FILING DATE: 2001-05-04
 ; PRIOR APPLICATION NUMBER: US 60/326,998
 ; PRIOR FILING DATE: 2001-10-05
 ; PRIOR APPLICATION NUMBER: US 60/331,045
 ; PRIOR FILING DATE: 2001-11-07
 ; NUMBER OF SEQ ID NOS: 350
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 348
 ; LENGTH: 117
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Modified human prion protein fragment
 US-10-050-898-348

Query Match 100.0%; Score 211; DB 14; Length 117;
 Best Local Similarity 100.0%; Pred. No. 4.9e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
 Db 52 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 91

RESULT 3

US-10-346-190-89
 ; Sequence 89, Application US/10346190
 ; Publication No. US20030219459A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Fellcioli, Erica
 ; APPLICANT: Renner, Wolfgang A.
 ; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
 ; FILE REFERENCE: 1700.0290003
 ; CURRENT APPLICATION NUMBER: US/10/346,190
 ; PRIOR FILING DATE: 2003-01-17
 ; PRIOR APPLICATION NUMBER: 60/396,590
 ; PRIOR FILING DATE: 2002-07-18
 ; PRIOR APPLICATION NUMBER: 60/393,725
 ; PRIOR FILING DATE: 2002-07-08
 ; PRIOR APPLICATION NUMBER: 60/389,898
 ; PRIOR FILING DATE: 2002-06-20

; PRIOR APPLICATION NUMBER: PCT/IB02/00166
 ; PRIOR FILING DATE: 2002-01-21
 ; PRIOR APPLICATION NUMBER: 10/050,902
 ; PRIOR FILING DATE: 2002-01-18
 ; NUMBER OF SEQ ID NOS: 164
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 89
 ; LENGTH: 117
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Modified Human Prion Protein Fragment
 US-10-346-190-89

Query Match 100.0%; Score 211; DB 14; Length 117;
 Best Local Similarity 100.0%; Pred. No. 4.9e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
 Db 52 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 91

RESULT 4

US-10-050-902-324
 ; Sequence 324, Application US/10050902
 ; Publication No. US20030175290A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin
 ; APPLICANT: Tisoc, Alain
 ; APPLICANT: Maurer, Patrick
 ; APPLICANT: Lechner, Franziska
 ; APPLICANT: Sebhel, Peter
 ; APPLICANT: Ploesek, Christine
 ; TITLE OF INVENTION: Molecular Antigen Array
 ; FILE REFERENCE: 1700.0190004
 ; CURRENT APPLICATION NUMBER: US/10/050, 902
 ; PRIOR FILING DATE: 2002-01-18
 ; PRIOR APPLICATION NUMBER: US 60/262,379
 ; PRIOR FILING DATE: 2001-01-19
 ; PRIOR APPLICATION NUMBER: US 60/288,549
 ; PRIOR FILING DATE: 2001-05-04
 ; PRIOR APPLICATION NUMBER: US 60/326,998
 ; PRIOR FILING DATE: 2001-10-05
 ; PRIOR APPLICATION NUMBER: US 60/331,045
 ; PRIOR FILING DATE: 2001-11-07
 ; NUMBER OF SEQ ID NOS: 350
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 324
 ; LENGTH: 124
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: mPrPt construct
 US-10-050-902-324

Query Match 100.0%; Score 211; DB 14; Length 124;
 Best Local Similarity 100.0%; Pred. No. 5.3e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 40
 Db 53 NNPFVDCVNITIKOHTVTTTGGNFETDVKMERVEQ 92

RESULT 5

US-10-050-898-324
 ; Sequence 324, Application US/10050898
 ; Publication No. US20030175711A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Renner, Wolfgang A.
 ; APPLICANT: Bachmann, Martin

APPLICANT: Tisec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrp
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellicholi, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Pilon Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrp
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lubra, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PrP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 121

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: H1-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match
Best Local Similarity 100.0%; Score 211; DB 14; Length 163;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122

RESULT 10

US-09-745-003-12
;; Sequence 12, Application US/09745003
;; Patent No. US20020042122A1
;; GENERAL INFORMATION:
;; APPLICANT: Bazan, Fernando J
;; TITLE OF INVENTION: Human Proteins; Related Reagents
;; FILE REFERENCE: P-P2
;; CURRENT APPLICATION NUMBER: US/09/745,003
;; CURRENT FILING DATE: 2000-12-20
;; NUMBER OF SEQ ID NOS: 13
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 12
;; LENGTH: 164
;; TYPE: PRT
;; ORGANISM: rodent
US-09-745-003-12

Query Match
Best Local Similarity 100.0%; Score 211; DB 9; Length 164;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 121

RESULT 11

US-10-470-848-10
;; Sequence 10, Application US/10470848
;; Publication No. US20040137421A1
;; GENERAL INFORMATION:
;; APPLICANT: President of Tohoku University
;; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
;; FILE REFERENCE: PH-1224-PCF
;; CURRENT APPLICATION NUMBER: US/10/470,848
;; CURRENT FILING DATE: 2003-07-31
;; PRIOR APPLICATION NUMBER: JP 2001-24279
;; PRIOR FILING DATE: 2001-01-31
;; NUMBER OF SEQ ID NOS: 10
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 10
;; LENGTH: 200
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 200;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40

Db 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 182

RESULT 12

US-10-470-848-3
;; Sequence 3, Application US/10470848
;; Publication No. US20040137421A1
;; GENERAL INFORMATION:
;; APPLICANT: President of Tohoku University
;; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
;; FILE REFERENCE: PH-1224-PCF
;; CURRENT APPLICATION NUMBER: US/10/470,848
;; CURRENT FILING DATE: 2003-07-31
;; PRIOR APPLICATION NUMBER: JP 2001-24279
;; PRIOR FILING DATE: 2001-01-31
;; NUMBER OF SEQ ID NOS: 10
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 3
;; LENGTH: 208
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 13

US-10-745-393-1
;; Sequence 1, Application US/10745393
;; Publication No. US20040203131A1
;; GENERAL INFORMATION:
;; APPLICANT: Faatz, Elke
;; APPLICANT: Scholz, Christian
;; APPLICANT: Stock, Werner
;; APPLICANT: Schaefer, Peter
;; TITLE OF INVENTION: Complexes comprising a prion protein and peptide [prolyl isomerase]
;; FILE REFERENCE: 12390 US3 (9793/141)
;; CURRENT APPLICATION NUMBER: US/10/745,393
;; CURRENT FILING DATE: 2003-12-23
;; PRIOR APPLICATION NUMBER: EP 0115225.3
;; PRIOR FILING DATE: 2001-06-22
;; PRIOR APPLICATION NUMBER: EP 01120939.2
;; PRIOR FILING DATE: 2001-08-31
;; PRIOR APPLICATION NUMBER: US 10/167,774
;; PRIOR FILING DATE: 2002-06-10
;; PRIOR APPLICATION NUMBER: US 10/179,905
;; PRIOR FILING DATE: 2002-06-24
;; NUMBER OF SEQ ID NOS: 3
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 1
;; LENGTH: 208
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match
Best Local Similarity 100.0%; Score 211; DB 17; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 14

US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chn-type prion protein
US-10-470-848-6

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
|||
Db 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 190

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
|||
Db 151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 190

Search completed: December 3, 2004, 01:07:44
Job time : 47.343 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSQNNFVHDCVNTIKQHTV.....ENFTETDVAMERIVEQNCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

1: geneseqp1980s:*\n2: geneseqp1990s:*\n3: geneseqp2000s:*\n4: geneseqp2001s:*\n5: geneseqp2002s:*\n6: geneseqp2003as:*\n7: geneseqp2003bs:*\n8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	242	100.0	253	4	AAB72339
2	242	100.0	253	4	AAB72345
3	242	100.0	253	4	AAB72356
4	242	100.0	254	6	ABR42791
5	239	98.8	117	5	ABG94357
6	239	98.8	117	5	ABG80669
7	239	98.8	117	5	ABD24196
8	239	98.8	142	2	AAW17686
9	239	98.8	163	7	ADB63859
10	239	98.8	200	5	ABG31907
11	239	98.8	208	3	AAB07318
12	239	98.8	208	3	AAB07329
13	239	98.8	208	5	ABG31902
14	239	98.8	245	4	AAB72342
15	239	98.8	245	4	AAB72352
16	239	98.8	253	2	AAR86715
17	239	98.8	253	2	AAW69660
18	239	98.8	253	2	AAW85901
19	239	98.8	253	2	AAW07994
20	239	98.8	253	3	AAW81485
21	239	98.8	253	3	AAW06272
22	239	98.8	253	3	AAW15035
23	239	98.8	253	4	AAW72347
24	239	98.8	253	4	AAW72353
25	239	98.8	253	4	AAW72344

26	239	98.8	253	4	AAB72351	Aab72351 Hamadryas
27	239	98.8	253	4	AAB72348	Aab72348 Pion pro
28	239	98.8	253	4	AAB72346	Aab72346 Pion pro
29	239	98.8	253	4	AAB72355	Aab72355 Pion pro
30	239	98.8	253	4	AAB72349	Aab72349 Pion pro
31	239	98.8	253	4	AAB72340	Aab72340 Orangutan
32	239	98.8	253	4	AAB72338	Aab72338 Human pri
33	239	98.8	253	4	AAB72354	Aab72354 Capuchin
34	239	98.8	253	4	AAB72341	Aab72341 Gorilla p
35	239	98.8	253	4	AAB61770	Aab61770 Human pri
36	239	98.8	253	4	AAB82112	Aab82112 Human pri
37	239	98.8	253	4	AAW65853	AAW65853 Human pri
38	239	98.8	253	5	ABP51787	ABP51787 Human pri
39	239	98.8	253	5	ABG31901	ABG31901 Human pri
40	239	98.8	253	5	ABR04426	ABR04426 Human pri
41	239	98.8	253	5	AAW15603	AAW15603 Human pri
42	239	98.8	253	5	ABW78009	ABW78009 Amino aci
43	239	98.8	253	5	ABG77181	ABG77181 Prostata
44	239	98.8	253	6	ABU58668	ABU58668 Human pri
45	239	98.8	253	6	AAW33227	AAW33227 Human pri

ALIGNMENTS

RESULT 1
AAB72339
ID AAB72339 standard; peptide; 253 AA.

AC AAB72339;
DT 17-MAY-2001 (first entry)

XX Chimpanzee prion protein cellular form (PrPc) amino acid sequence.

XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;

XX Prion disease; spongiform encephalopathies; scrapie; chimpanzee;

XX bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.

XX Pan paniscus.

XX Key Location/Qualifiers

XX Region 176..221

XX /note="stable region, specifically claimed in claim 3"

XX WO200107479-A2.

XX PD 01-FEB-2001.

XX 25-JUL-2000; 2000WO-GB002873.

XX 27-JUL-1999; 99GB-00017491.

XX PR 30-JUL-1999; 99GB-00017878.

XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.

XX Collinge J, Clarke AR, Walcho JP, Jackson GS, Hosszu LLP;

XX WPI; 2001-168538/17.

XX New prion peptide for treating, preventing and/or diagnosing prion

XX diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in

XX cows and Creutzfeldt-Jakob disease in humans.

XX Claim 3; Fig 5; 69pp; English.

XX This invention relates to a peptide fragment of a cellular form of prion

XX protein PrPc located around a disulphide bond found in PrPc. The stable

XX structure is a specific marker of PrPc but not soluble prion protein

XX (PrPsc). The PrPc peptide sequences can be used to generate an antibody

XX or binding agent that binds PrPc. The antibody is used to detect or

XX remove PrPc, and may be used in preventative medicine. The antibody may

XX be used in the prevention, treatment or diagnosis of a prion disease,

CC e.g. spongiform encephalopathies, such as scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC chimpanzee prion protein, the stable region of the protein may be used in
CC the production of anti-PrPc antibodies
XX
SQ Sequence 253 AA;

Query Match 100.0%; Score 242; DB 4; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.6e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETFDVKKMERVVEQWCI 46
DB 170 SSQNNFVHDCVNTTIKQHTVTTTGGNFETFDVKKMERVVEQWCI 215

RESULT 2
ID AAB72345 standard; peptide; 253 AA.
XX
AC AAB72345;
XX
DT 17-MAY-2001 (first entry)
XX

DE Glibon prion protein cellular form (PrPc) amino acid sequence.
XX
KM Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
KM prion disease; spongiform encephalopathies; Scrapie; glibon;
XX bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
OS
XX Hylobates lar.

FX Key Location/Qualifiers
FT Region 176..221
XX /note="Stable region, specifically claimed in claim 3"
XX
PN WO200107479-A2.
XX
PD 01-FEB-2001.
XX
PF 25-JUL-2000; 2000MO-GB002873.
XX
PR 27-JUL-1999; 99GB-00017491.
PR 30-JUL-1999; 99GB-00017878.
XX
PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
FI Collinge J, Clarke AR, Maithe JP, Jackson GS, Hosszu LLP;
XX
DR WPI; 2001-168538/17.
XX

PT New prion peptide for treating, preventing and/or diagnosing prion
PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
PT cows and Creutzfeldt-Jakob disease in humans.
XX
XX
PS Claim 3; Fig 5; 69pp; English.

CC This invention relates to a peptide fragment of a cellular form of prion
CC protein PrPc located around a disulphide bond found in PrPc. The stable
CC structure is a specific marker of PrPc but not soluble prion protein
CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
CC or binding agent that binds PrPc. The antibody is used to detect or
CC be used in the prevention, treatment or diagnosis of a prion disease,
CC e.g. spongiform encephalopathies, such as scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC glibon prion protein, the stable region of the protein may be used in the
CC production of anti-PrPc antibodies
XX
SQ Sequence 253 AA;

Query Match 100.0%; Score 242; DB 4; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.6e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETFDVKKMERVVEQWCI 46
DB 170 SSQNNFVHDCVNTTIKQHTVTTTGGNFETFDVKKMERVVEQWCI 215

RESULT 3
ID AAB72356 standard; peptide; 253 AA.
XX
AC AAB72356;
XX
DT 17-MAY-2001 (first entry)
XX

DE Siamang prion protein cellular form (PrPc) amino acid sequence.
XX
KM Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
KM prion disease; spongiform encephalopathies; Scrapie; siamang;
XX bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
OS
XX Hylobates syndactylus.

FX Key Location/Qualifiers
FT Region 176..221
XX /note="Stable region, specifically claimed in claim 3"
XX
PN WO200107479-A2.
XX
PD 01-FEB-2001.
XX
PF 25-JUL-2000; 2000MO-GB002873.
XX
PR 27-JUL-1999; 99GB-00017491.
PR 30-JUL-1999; 99GB-00017878.
XX
PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
XX
FI Collinge J, Clarke AR, Maithe JP, Jackson GS, Hosszu LLP;
XX
DR WPI; 2001-168538/17.
XX

PT New prion peptide for treating, preventing and/or diagnosing prion
PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
PT cows and Creutzfeldt-Jakob disease in humans.
XX
XX
PS Claim 3; Fig 5; 69pp; English.

CC This invention relates to a peptide fragment of a cellular form of prion
CC protein PrPc located around a disulphide bond found in PrPc. The stable
CC structure is a specific marker of PrPc but not soluble prion protein
CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
CC or binding agent that binds PrPc. The antibody is used to detect or
CC be used in the prevention, treatment or diagnosis of a prion disease,
CC e.g. spongiform encephalopathies, such as scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC siamang prion protein, the stable region of the protein may be used in
CC the production of anti-PrPc antibodies
XX
SQ Sequence 253 AA;

Query Match 100.0%; Score 242; DB 4; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.6e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETFDVKKMERVVEQWCI 46
DB 170 SSQNNFVHDCVNTTIKQHTVTTTGGNFETFDVKKMERVVEQWCI 215

RESULT 4
ABR42791 standard; protein; 254 AA.
XX ABR42791;
AC ABR42791;
XX 08-SEP-2003 (first entry)
XX Chimpazee prion protein.
XX Chimpazee prion protein.
XX Chimpazee; prion protein; prionosis; neurotropic; neuroprotective;
XX immunogen; vaccine.
XX Pan troglodytes.
XX MO2003045128-A2.
XX 05-JUN-2003.
XX 21-NOV-2002; 2002MO-US037634.
XX 21-NOV-2001; 2001US-0331801P.
XX (UTNY) UNIV NEW YORK STATE.
XX Frangione B, Wisniewski T, Sigurdsson EM;
XX WPI, 2003-505145/47.
XX New synthetic immunogenic but non-deposit forming peptides, useful for
XX inducing an immune response to prions, amyloids, amylin or amylin
XX fibrils, particularly for treating e.g. Alzheimer's, scrapie or
XX Creutzfeldt-Jacob disease.
XX Disclosure; Page 226; 265pp; English.
XX The present sequence is the amino acid sequence of chimpanzee prion
XX protein. The invention provides a synthetic immunogenic but non-deposit-
XX forming polypeptide that is homologous to human (see ABR42789) or bovine
XX (see ABR42798) prion protein. Such peptides, alone or conjugated to an
XX immunostimulant, are used to induce an immune response to prion, and
XX immunizing compositions comprising the peptides are used in a claimed
XX method for inducing an immune response to hnp and prion deposits.
XX Antibodies directed against the peptides can be used in passive
XX immunization
XX Sequence 254 AA;
SQ
Query Match 100.0%; Score 242; DB 6; Length 254;
Best Local Similarity 100.0%; Pred. No. 1.ee-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 SQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 170 SQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 215

RESULT 5
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX ABG94357;
XX 10-DEC-2002 (first entry)
XX Modified human prion protein fragment.
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
XX cytoskeletal; antiviral; antidiabetic; hypoglycaemic; antigen array;
XX vaccine; infectious disease.
XX Homo sapiens.
OS

XX MO200256905-A2.
XX 25-JUL-2002.
XX 21-JAN-2002; 2002MO-IB000166.
XX 19-JAN-2001; 2001US-0262379P.
XX 04-MAY-2001; 2001US-0288549P.
XX 05-OCT-2001; 2001US-0326988P.
XX 07-NOV-2001; 2001US-0331045P.
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
XX Piossek C;
XX WPI; 2002-627351/67.
XX Molecular antigen array used in the production of vaccines for infectious
XX diseases.
XX Disclosure; Page 441; 441pp; English.
XX This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organism comprising
XX at least one first attachment site, where the organism is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide
XX (Abeta1-42) or its fragment and where the second attachment site is
XX selected from an attachment site not naturally occurring with the antigen
XX or antigenic determinant and an attachment site naturally occurring with
XX the antigen or antigenic determinant, where the second attachment site is
XX capable of association through at least one non-peptide bond to the first
XX attachment site and where the association to form an ordered and
XX scaffold interact through the association to form an ordered and
XX repetitive antigen array. The invention also comprises a coat protein
XX capable of forming a capsid which comprises mutant Obeta coat proteins
XX having an amino acid sequence selected from five amino acid sequences
XX fully defined in the specification. The compounds of the invention may
XX have antimicrobial, antiallergic, immunomodulatory, cytoskeletal,
XX antiviral, antidiabetic, or hypoglycaemic activities and may be used in
XX immunisation and as a vaccine. The present sequence represents a protein
XX sequence used to create the compositions of the invention
XX Sequence 117 AA;
SQ
Query Match 98.8%; Score 239; DB 5; Length 117;
Best Local Similarity 97.8%; Pred. No. 1.ee-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 SQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
DB 49 SQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 94

RESULT 6
ABG80669
ID ABG80669 standard; protein; 117 AA.
XX ABG80669;
XX 29-NOV-2002 (first entry)
XX Human prion protein/cysteine-containing peptide fusion protein.
XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutein;
XX graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
XX

KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW angiotensin-converting enzyme inhibitor; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 OS Homo sapiens.
 OS Synthetic.
 XX WO200256907-A2.
 XX
 XX PD 25-JUL-2002.
 XX
 XX PF 21-JAN-2002; 2002MO-IB000168.
 XX PR 19-JAN-2001; 2001US-0262379P.
 XX PR 04-MAY-2001; 2001US-0288349P.
 XX PR 05-OCT-2001; 2001US-0326988P.
 XX PR 07-NOV-2001; 2001US-0331045P.
 XX
 XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX PA (NOVS) NOVARTIS PHARMA AG.
 XX PA (MAUR) MAURER P.
 XX PA (LECH) LECHNER F.
 XX PA (ORTM) ORTMANN R.
 XX PA (LUBO) LUBEND R.
 XX PA (STAU) STAUFENBIEL M.
 XX PA (FREY) FREY P.
 XX
 XX PI Maurer P, Lechner F, Ortman R, Luegend R, Staufenbiel M, Frey P;
 XX PI Renner WA, Bachmann M, Tisac A, Seibel P, Plosssek C;
 XX WPI; 2002-636514/68.
 XX
 XX DR Molecular antigen array used in the production of vaccines for infectious
 XX diseases.
 XX
 XX PS Disclosure; Page 418; 418pp; English.
 XX
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (11) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IgG-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angiotensin-converting enzyme inhibitor, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC sequence for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).

XX SQ Sequence 117 AA;
 Query Match
 Best Local Similarity 98.8%; Score 239; DB 5; Length 117;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 1 SSQNNFVHDCVNTITIKOHVTTTGTGNTERTDVMKERVYQWCI 46
 49 SSQNNFVHDCVNTITIKOHVTTTGTGNTERTDVMKERVYQWCI 94
 Db
 RESULT 7
 ADD24196
 ID ADD24196 standard; protein; 117 AA.
 AC ADD24196;
 XX 15-JAN-2004 (first entry)
 XX DE Modified human prion protein amino acid sequence.
 XX KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mutein.
 OS Synthetic.
 OS prion.
 XX WO2003059386-A2.
 XX PD 24-JUL-2003.
 XX
 XX PF 17-JAN-2003; 2003MO-EP000460.
 XX PR 18-JAN-2002; 2002US-00050902.
 XX PR 21-JAN-2002; 2002MO-IB000166.
 XX PR 08-JUL-2002; 2002US-0393725P.
 XX PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX PA Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 XX
 XX DR A vaccine composition for preventing or treating prion diseases (e.g.
 XX Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNP-
 XX particle) and at least one prion protein or peptide bound to the virus-like
 XX particle.
 XX
 XX PS Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 XX SQ Sequence 117 AA;
 Query Match
 Best Local Similarity 98.8%; Score 239; DB 7; Length 117;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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QY      1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
      1:|||||
      49 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94
      DB

RESULT 8
AAW17686
ID      AAW17686 standard; peptide; 142 AA.
XX
XX
AC      AAW17686;
XX
XX
DT      14-JAN-1998 (first entry)
XX
XX
DE      Prion protein peptide Hu 90-231.
XX
XX
KM      Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
KM      scrapie; bovine spongiform encephalopathy; BSE; CJD;
KM      Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
KM      Gerstmann-Strausler-Scheinker disease; hamster; human.
XX
XX
OS      Homo sapiens.
XX
PN      M09716728-A1.
XX
XX
PD      09-MAY-1997.
XX
XX
PF      28-OCT-1996; 96MO-US017462.
XX
XX
PR      02-NOV-1995; 95US-00556823.
XX
XX
PA      (REGC ) UNIV CALIFORNIA.
XX
XX
PI      Prusiner SB, Kaneko K, Cohen FE;
XX
XX
WPI; 1997-272248/24.
XX
XX
PT      Prion proteins (PrPs) having at least one alpha-helical domain - used in
PT      assays for screening compounds able to inhibit or decrease the binding of
PT      PrP peptide(s) to cellular prion proteins or peptide(s).
XX
XX
PS      Claim 11; Page 7-38; 50pp; English.
XX
XX
CC      The present sequence represents a prion protein (PrP) peptide. PrP has an
CC      ability to induce a conformational change in cellular prion protein (PrP-
CC      c). Methods for screening compounds which inhibit the binding of PrP-c
CC      to a PrP peptide, are used for screening for drugs that may be useful in
CC      the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
CC      encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
CC      Strausler-Scheinker disease) and FFI (fatal familial insomnia)
XX
XX
SQ      Sequence 142 AA;
XX
XX
Query Match      98.8%; Score 239; DB 2; Length 142;
Best Local Similarity 97.8%; Pred. No. 2e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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KM      cell regeneration; membrane protein; signal transduction-related protein;
KM      transcription-related protein; osteoporosis; neurological disease;
KM      cancer; tumour.
XX
XX
OS      Homo sapiens.
XX
XX
PN      EP1308459-A2.
XX
XX
PD      07-MAY-2003.
XX
XX
PF      28-MAR-2002; 2002EP-00007401.
XX
XX
PR      05-NOV-2001; 2001JP-00379298.
PR      25-JAN-2002; 2002US-00350978.
XX
XX
PA      (HELI-) HELIX RES INST.
PA      (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
XX
PI      Isogai T, Sugiyama T, Otsuki T, Makamatsu A, Sato H, Ishii S,
PI      Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
PI      Seki N, Yoshikawa T, Otsuka M, Nagahara K, Masuno Y;
XX
XX
WPI; 2003-450961/43.
XX
XX
DR      N-PSDB; ADB61889.
XX
XX
PT      New polynucleotides and polypeptides, useful for developing a diagnostic
PT      marker or medicines for regulation of their expression and activity, or
PT      as targets of gene therapy.
XX
XX
PS      Claim 1; Page; 222pp; English.
XX
XX
CC      The invention discloses a polynucleotide comprising a sequence selected
CC      from 1970 fully defined nucleotide sequences which encode novel
CC      polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
CC      or its partial peptide, an antibody binding to the polypeptide or peptide
CC      of the polynucleotide, immunologically assaying the polypeptide or
CC      peptide of the polynucleotide by contacting the polypeptide or peptide
CC      with the antibody of the encoded protein, and observing the binding
CC      between the two, a transformant carrying the polynucleotide in an
CC      expressible manner and an antisense polynucleotide. The oligonucleotide
CC      is useful as a primer for synthesizing the polynucleotide, or as a probe
CC      for detecting the polynucleotide. The polynucleotides and encoded
CC      proteins are useful as pharmaceutical agents and many disease-related
CC      genes may be included in them, for developing a diagnostic marker or
CC      medicines for regulation of their expression and activity, or as targets
CC      of gene therapy. The genes are involved in tissue and/or cell
CC      regeneration. Membrane proteins, signal transduction-related proteins,
CC      transcription-related proteins, disease-related proteins and genes
CC      encoding them can be used as indicators for diseases (e.g. osteoporosis,
CC      neurological diseases, cancer, tumours. The cDNA may be used to regulate
CC      the activity or expression of the encoded protein to treat diseases. The
CC      sequence presented is a protein of the invention. Note: Some of the
CC      sequence data for this patent is not represented in the printed
CC      specification, but is based on sequence information supplied by the
CC      European Patent Office.
XX
XX
SQ      Sequence 163 AA;
XX
XX
Query Match      98.8%; Score 239; DB 7; Length 163;
Best Local Similarity 97.8%; Pred. No. 2.e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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QY      1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
      1:|||||
      81 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 126
      DB

RESULT 9
ADB63859
ID      ADB63859 standard; protein; 163 AA.
XX
XX
AC      ADB63859;
XX
XX
DT      04-DEC-2003 (first entry)
XX
XX
DE      Human protein encoded by clone ASTR020055570.
XX
XX
KW      Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;

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QY      1 SSONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
      1:|||||
      80 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 125
      DB

RESULT 10
ABG31907
ID      ABG31907 standard; protein; 200 AA.
XX
XX
AC      ABG31907;
XX
XX

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DT 05-NOV-2002 (first entry)
 XX Human prion protein related peptide #6.
 DE Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX Homo sapiens.
 OS MO200261418-A1.
 PN 08-AUG-2002.
 PD 31-JAN-2002; 2002MO-JP000803.
 PF 31-JAN-2001; 2001JP-00024279.
 PR (TOHO) UNITV TOHOKU.
 XX Kilmoto T, Miyoshi K, Mohri S;
 PI WPI; 2002-619277/66.
 DR Screening (non-)human prion disease infection factor based on abnormal
 XX prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Example 2; Page 63-64; 69pp; Japanese.
 XX This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor which is applicable in safety tests
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 CC Sequence 200 AA;
 SQ
 Query Match 98.8%; Score 239; DB 5; Length 200;
 Best Local Similarity 97.8%; Pred. No. 3e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 140 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 185
 RESULT 11
 AAB07318
 ID AAB07318 standard; protein; 208 AA.
 AC AAB07318;
 XX 17-OCT-2000 (first entry)
 DT Human prion protein sequence.
 DE Human prion protein sequence.
 XX Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX Homo sapiens.
 OS Homo sapiens.
 PN Key
 FT Location/Qualifiers
 FT 29..69
 FT /note= "Repeat region consisting of tandem repeats of
 FT Disulfide-bond 157..192
 FT Modified-site
 FT /note= "C-terminal phospho-inositol glycolipid membrane

FT anchor (-GPI)"
 XX MO200029850-A1.
 PN 25-MAY-2000.
 PD 27-OCT-1999; 99MO-FI000897.
 PF 17-NOV-1998; 98FI-00002481.
 PR (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX Hope J, Barnard GJR, Birkett CR;
 PI WPI; 2000-387880/33.
 DR Novel immunoassay for prion protein, used for the determination of
 XX transmissible spongiform encephalopathies in bovines.
 PS Disclosure; Page 43-44; 50pp; English.
 XX The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of transmissible
 CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an
 CC antibody, which is then detected. The presence of PrP epitope is captured by an
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC Sequence 208 AA;
 SQ
 Query Match 98.8%; Score 239; DB 3; Length 208;
 Best Local Similarity 97.8%; Pred. No. 3.1e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 148 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 193
 RESULT 12
 AAB07329
 ID AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 XX 17-OCT-2000 (first entry)
 DT Human prion protein sequence.
 DE Human prion protein sequence.
 XX Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX Homo sapiens.
 OS Homo sapiens.
 PN Key
 FT Location/Qualifiers
 FT 29..69
 FT /note= "Repeat region consisting of tandem repeats of
 FT Disulfide-bond 157..192
 FT Modified-site
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT MO200029849-A1.
 PN 25-MAY-2000.
 PD

PF 27-OCT-1999; 99MO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 XX (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkelt CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 XX
 CC The present sequence is the human prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 XX
 SQ Sequence 208 AA;
 Query Match 98.8%; Score 239; DB 3; Length 208;
 Best Local Similarity 97.8%; Pred. No. 3.1e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SSQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 Db 148 SNNQNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 193
 RESULT 13
 ABB31902
 ID ABB31902 standard; protein; 208 AA.
 AC
 XX ABB31902;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related protein #2.
 XX
 KW Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200261418-A1.
 XX
 PD 08-AUG-2002.
 XX
 PF 31-JAN-2002; 2002WO-JP000803.
 XX
 PR 31-JAN-2001; 2001JP-00024279.
 XX
 PA (TOHO) UNIV TOHOKU.
 XX
 PI Kitamoto T, Miyoshi K, Mohri S;
 XX
 DR WPI; 2002-619277/66.
 XX
 PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX

PS Disclosure; Page 49-50; 69pp; Japanese.
 XX
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;
 Query Match 98.8%; Score 239; DB 5; Length 208;
 Best Local Similarity 97.8%; Pred. No. 3.1e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SSQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 Db 148 SNNQNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQWCI 193
 RESULT 14
 AAB72342
 ID AAB72342 standard; peptide; 245 AA.
 XX
 AC AAB72342;
 XX
 DT 06-AUG-2003 (revised)
 DT 17-MAY-2001 (first entry)
 XX
 DE Monkey prion protein cellular form (PrPc) amino acid sequence.
 XX
 KW prion protein; cellular form; PrPc; scrapie; BSE; CJD;
 KW prion disease; spongiform encephalopathies; scrapie; monkey;
 KW bovine spongiform encephalopathy; BSE; Creutzfeldt-Jacob disease.
 XX
 OS Primates.
 XX
 FH Key Location/Qualifiers
 FT Region 176..221
 FT /note="Stable region, specifically claimed in claim 3"
 XX
 PN WO200107479-A2.
 XX
 PD 01-FEB-2001.
 XX
 PF 25-JUL-2000; 2000WO-GB002873.
 XX
 PR 27-JUL-1999; 99GB-00017491.
 PR 30-JUL-1999; 99GB-00017878.
 XX
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 PI Collinge J, Clarke AR, Walcho JP, Jackson GS, Hosszu LBP;
 XX
 DR WPI; 2001-168538/17.
 XX
 PT New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jacob disease in humans.
 XX
 PS Claim 3; Fig 5; 69pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease,

CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC monkey prion protein, the stable region of the protein may be used in the
CC production of anti-PrPc antibodies. (Updated on 06-AUG-2003 to correct OS
CC field.)
XX

SO Sequence 245 AA;

Query Match 98.8%; Score 239; DB 4; Length 245;
Best Local Similarity 97.8%; Pred. No. 3.8e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQMC 46
162 SSONNFVHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQMC 207

RESULT 15

AAB72352
ID AAB72352 standard; peptide; 245 AA.

AC AAB72352;

DT 17-MAY-2001 (first entry)

DB Cercopithecus prion protein cellular form (PrPc) amino acid sequence.

XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;

KM prion disease; spongiform encephalopathies; Scrapie; cercopithecus;

XX bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.

OS Cercopithecus sp.

Key Location/Qualifiers
FT Region 176..221

PN WO200107479-A2.
/note="Stable region, specifically claimed in claim 3"

PD 01-FEB-2001.

PP 25-JUL-2000; 2000WO-GB002673.

XX 27-JUL-1999; 99GB-00017491.

PR 30-JUL-1999; 99GB-00017678.

XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.

PI Collinge J, Clarke AR, Waltho JP, Jackson GS, Hosszu LLP;

XX WPI; 2001-168538/17.

DR New prion peptide for treating, preventing and/or diagnosing prion
PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
PT cows and Creutzfeldt-Jakob disease in humans.
XX

PS Claim 3; Fig 5; 69pp; English.

CC This invention relates to a peptide fragment of a cellular form of prion
CC protein PrPc located around a disulphide bond found in PrPc. The stable
CC structure is a specific marker of PrPc but not soluble prion protein
CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
CC or binding agent that binds PrPc. The antibody is used to detect or
CC remove PrPc, and may be used in preventative medicine. The antibody may
CC be used in the prevention, treatment or diagnosis of a prion disease,
CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
CC (CJD) in humans. The present sequence represents the cellular form of
CC ceropithecus prion protein, the stable region of the protein may be used
CC in the production of anti-PrPc antibodies
XX
XX Sequence 245 AA;

Query Match 98.8%; Score 239; DB 4; Length 245;
Best Local Similarity 97.8%; Pred. No. 3.8e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQMC 46
162 SSONNFVHDCVNTITIKOHTVTTTGGNFETDVKMERVVEQMC 207

Search completed: December 3, 2004, 00:55:37
Job time: 77.1639 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSQNNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQWCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB ID	Description
1	242	100.0	253	2	SS3635
2	242	100.0	253	2	I61847
3	239	98.8	241	2	S71048
4	239	98.8	241	2	S71056
5	239	98.8	245	2	S71045
6	239	98.8	253	1	UJHU
7	239	98.8	253	2	I84423
8	239	98.8	253	2	S71055
9	239	98.8	253	2	I17032
10	238	98.3	226	2	A53892
11	238	98.3	252	2	I61848
12	238	98.3	252	2	A23544
13	237	97.9	253	2	S53617
14	237	97.9	264	2	S37137
15	236	97.5	232	2	S71041
16	236	97.1	254	2	B34759
17	235	97.1	254	2	A34759
18	234	96.7	245	2	S53627
19	234	96.7	252	2	S53614
20	234	96.7	253	2	S53624
21	234	96.7	253	2	S53623
22	234	96.7	253	2	S53620
23	234	96.7	253	2	S53614
24	234	96.7	253	2	S53616
25	234	96.7	253	2	S53618
26	234	96.7	253	2	S53619
27	234	96.7	256	2	UJ0268
28	234	96.7	256	2	UJ0268
29	234	96.7	264	2	A54330

30	233	96.3	256	2	S37149	prion protein - go
31	233	96.3	256	2	A54281	major prion protei
32	233	96.3	260	2	S53629	major prion protei
33	231	95.5	252	2	S53634	major prion protei
34	230	95.0	239	2	S53633	major prion protei
35	230	95.0	257	2	JQ1900	major prion protei
36	228	94.2	252	2	JC6175	prion protein - ra
37	227	93.8	254	1	UJHYIH	major prion PrP-Sc
38	227	93.8	257	2	A23545	major prion PrP27-
39	227	93.8	267	2	A37372	prion protein homo
40	77	31.8	267	1	UJCH	major prion protei
41	76	31.4	273	2	A46280	prion protein - ch
42	61.5	25.4	533	1	D71338	probable ribose/ga
43	60.5	25.0	182	2	A10130	conserved hypothe
44	58.5	24.2	258	2	AF2524	hypothetical prote
45	58	24.0	139	2	H90004	hypothetical prote

ALIGNMENTS

RESULT 1
S53635
prion protein - siamang
C:Species: Hylobates syndactylus (siamang)
C>Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jul-2004
C:Accession: S53635
R:Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53635
A:Status: nucleic acid sequence not shown; translation not shown
A:Residues: 1-253 <SCH>
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: UNIPROT:P61767; EMBL:U08308; NID:9474374; PIDN:AAC50096.1; PID:947437
A:Note: the source was designated as Sympathus syndactylus
A:Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
C:Superfamily: major prion protein

Query Match 100.0%; Score 242; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.4e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 170 SSQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 2

I61847
major prion protein precursor - chimpanzee
C:Species: Pan troglodytes (chimpanzee)
C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C:Accession: I61847; S71060; S53615
R:Cervanekova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A:Title: Infectious amyloid precursor gene sequences in primates used for experimental c
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I61847
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: UNIPROT:P61768; EMBL:U15039; NID:9609303; PIDN:AAA68632.1; PID:96093
R:Schaeztl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71060
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08296; NID:9474350; PIDN:AAC50085.1; PID:9474351
R:Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

A>Title: Prion protein gene variation among primates.
A/Accession: S53614; MUID:95139066; PMID:7837269
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210, 'R', 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 242; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.4e-22;
Matches 45; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 46
Db 170 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 215

RESULT 3

major prion protein - Calliobus moloch (fragment)
C/Species: Calliobus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71048; S53632
R/Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G4755
R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A/Accession: S53614; MUID:95139066; PMID:7837269
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCH>
A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 241;
Best Local Similarity 97.8%; Pred. No. 3.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 46
Db 163 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 208

RESULT 4

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71056; S53621
R/Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A/Accession: S71056
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743
R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A/Accession: S53614; MUID:95139066; PMID:7837269
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCH>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 241;
Best Local Similarity 97.8%; Pred. No. 3.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 46
Db 163 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 208

RESULT 5

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71045; S53628
R/Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G4743
R/Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.B.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A/Accession: S53614; MUID:95139066; PMID:7837269
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 8-10, 'I', 12-202, 'R', 204-239 <SCH>
A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 239; DB 2; Length 245;
Best Local Similarity 97.8%; Pred. No. 3.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 46
Db 162 SSQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKKMERVVEQWCI 207

RESULT 6

major prion protein precursor - human
N/Alternate names: 11k amyloid protein; 27-30kialoglycoprotein; PrP 27-30; PrP 33-35C;
C/Species: Homo sapiens (man)
C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C/Accession: A24173; A40372; A05017; S14078; I5432; I68597; I58135; I59184; I79633; I796
R/Kretschmar, H.A.; Stowling, L.E.; Westaway, D.; Studdiblane, W.H.; Prusiner, S.B.; De
DNA 5, 315-324, 1986
A>Title: Molecular cloning of a human prion protein cDNA.
A/Accession: A24173; MUID:86300093; PMID:3756572
A/Molecule type: mRNA
A/Residues: 1-253 <KR>
A/Cross-references: UNIPROT:P04156; GB:M13899; NID:G190467; PIDN:AAA60182.1; PID:G190468
R/Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 330-329, 1991
A>Title: Genomic structure of the human prion protein gene.
A/Accession: A40372; MUID:91328137; PMID:1678248
A/Status: not compared with conceptual translation
A/Molecule type: DNA
A/Residues: 1-80, 89-253 <PUC>
A/Cross-references: GB:X83416; NID:G747846; PIDN:CAA58442.1; PID:G747847
A>Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not }

Db

170 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 215

RESULT 9

Major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
R/CervenaKova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 137032

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:G563208; PIDN:AAA68633.1; PID:G5632

C/Superfamily: major prion protein

Query Match

Best Local Similarity 98.8%; Score 239; DB 2; Length 253;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db

170 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 215

RESULT 10

Prion-related protein - rat (fragment)
C/Species: Rattus norvegicus (Norway rat)
C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
R/Lilao, Y.C.; Tokes, Z.; Iam, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.

A/Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; MUID:88037055; PMID:2889848

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LUA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C/Superfamily: major prion protein

Query Match

Best Local Similarity 98.3%; Score 238; DB 2; Length 226;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db

142 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 187

RESULT 11

Major prion protein precursor - common squirrel monkey
C/Species: Saimiri sciureus (common squirrel monkey)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
R/CervenaKova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 161848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G5595852; PIDN:AAA68636.1; PID:G5958

C/Superfamily: major prion protein

Query Match

98.3%; Score 238; DB 2; Length 252;

Best Local Similarity 95.7%; Pred. No. 4.4e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db

169 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 214

RESULT 12

Major prion protein precursor - mouse
N/Alternate names: PrP; Scrapie prion
C/Species: Mus musculus (house mouse)
C/Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004
R/Westaway, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; MUID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <WES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529

A/Experimental source: strains NZW and I/Lm

A/Note: the sequence shown is from the NZW strain; the sequence from the I/Lm strain dit

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, U.; Multhup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a

A/Reference number: S02521; MUID:8616695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Chesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and ur

A/Reference number: A22315; MUID:86213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132; 'V', 134-164 <CHE>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <SIC>

F/23-234/Product: major prion protein #status predicted <SIC>

F/232-254/Domain: carboxyl-terminal propeptide #status predicted <MAT>

F/178-213/Disulfide bonds: #status predicted <CTP>

F/180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match

98.3%; Score 238; DB 2; Length 254;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Db

169 SNONNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC1 214

RESULT 13

Major prion protein - common gibbon
C/Species: Hylobates lar (common gibbon, white-handed gibbon)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
R/Schneitz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

U. Mol. Biol. 245, 369-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53614

A/Molecule type: DNA

A/Residues: 1-254 <WES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529

A/Experimental source: strains NZW and I/Lm

A/Note: the sequence shown is from the NZW strain; the sequence from the I/Lm strain dit

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, U.; Multhup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain a

A/Reference number: S02521; MUID:8616695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Chesbro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and ur

A/Reference number: A22315; MUID:86213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132; 'V', 134-164 <CHE>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <SIC>

F/23-234/Product: major prion protein #status predicted <SIC>

F/232-254/Domain: carboxyl-terminal propeptide #status predicted <MAT>

F/178-213/Disulfide bonds: #status predicted <CTP>

F/180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match

98.3%; Score 238; DB 2; Length 254;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

A:Accession: S53617
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: UNIPROT:P61766; EMBL:U08299
 R:Scharz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71050
 A:Molecule type: DNA
 A:Residues: 1-210, 'E', 212-253 <SCW>
 A:Cross-references: EMBL:U08299; NID:G474356; PIDN:AAC50088.1; PID:G474357
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.9%; Score 237; DB 2; Length 253;
 Best Local Similarity 97.8%; Pred. No. 5.9e-22;
 Matches 45; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 170 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 14
 S37137
 prion protein - greater kudu
 C:Species: Tragelaphus strepsiceros (greater kudu)
 C>Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: S37137
 R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 Submitted to the EMBL Data Library, August 1993
 A:Reference number: S37137
 A:Accession: S37137
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-264 <MAR>
 A:Cross-references: UNIPROT:P40242; EMBL:X74771; NID:G398937; PIDN:CA52781.1; PID:G3989
 C:Superfamily: major prion protein

Query Match 97.9%; Score 237; DB 2; Length 264;
 Best Local Similarity 93.5%; Pred. No. 6.2e-22;
 Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 181 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 226

RESULT 15
 S71041
 major prion protein - black-handed spider monkey (fragment)
 C:Species: Atelates Geoffroyi (black-handed spider monkey)
 C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
 C:Accession: S71041; S53630
 R:Scharz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71041
 A:Molecule type: DNA
 A:Residues: 1-232 <SCH>
 A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G4743
 R:Scharz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53630
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-194, 'R', 196-231 <SCW>
 A:Cross-references: EMBL:U08309
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.5%; Score 236; DB 2; Length 232;
 Best Local Similarity 95.7%; Pred. No. 7.2e-22;
 Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 46
 Db 154 NNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMC 199

Search completed: December 3, 2004, 00:38:38
 Job time: 13.8 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using SW model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Sequence: 1 SSGNNFVHDCVNTTKQHTV.....ENFTEDVKKMERVQKCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database: UniProt 02:.*
1: uniprot_sprot:.*
2: uniprot_tramb1:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	242	100.0	253	1	PRIO_HYLLA
2	242	100.0	253	1	PRIO_HYLLA
3	242	100.0	253	1	PRIO_HYLLA
4	239	98.8	238	1	PRIO_CERAT
5	239	98.8	238	1	PRIO_THRGE
6	239	98.8	238	2	Q6EXE1
7	239	98.8	241	1	PRIO_CALMO
8	239	98.8	241	1	PRIO_MANSF
9	239	98.8	245	1	PRIO_CERAF
10	239	98.8	246	1	PRIO_CERNO
11	239	98.8	246	1	PRIO_CERNE
12	239	98.8	246	1	PRIO_CERNO
13	239	98.8	246	1	PRIO_CERNO
14	239	98.8	246	2	AA083636
15	239	98.8	252	1	PRIO_CEBAP
16	239	98.8	253	1	PRIO_COLGU
17	239	98.8	253	1	PRIO_GORGO
18	239	98.8	253	1	PRIO_HUMAN
19	239	98.8	253	1	PRIO_MACRA
20	239	98.8	253	1	PRIO_PONPY
21	239	98.8	253	1	PRIO_PREFR
22	239	98.8	253	2	Q6FGR8
23	239	98.8	253	2	Q6L199
24	239	98.8	253	2	AA880162
25	239	98.8	253	2	AA880162
26	239	98.8	253	2	AA880162
27	239	98.8	277	2	AA880162
28	239	98.8	285	2	Q75942
29	239	98.8	248	2	Q866V6
30	238	98.3	253	2	Q920T5
31	238	98.3	254	1	PRIO_MOUSE

32	238	98.3	254	1	PRIO_RAT	P13852	rattus norv
33	238	98.3	254	2	Q8VHV6	Q8VHV6	apodemus by
34	238	98.3	254	2	AA01993	AA01993	rattus no
35	238	98.3	260	1	PRIO_SAIIS	P40258	saimiri sci
36	237	97.9	220	2	Q866W7	Q866W7	gacholona pr
37	237	97.9	226	2	Q97907	Q97907	gacholona pr
38	237	97.9	227	2	Q97907	Q97907	gacholona pr
39	237	97.9	256	1	PRP2_TRASP	P40243	trigellaphus
40	237	97.9	256	2	Q866V2	Q866V2	trigellaphus
41	237	97.9	264	1	PRP1_TRASP	P40242	trigellaphus
42	236	97.5	232	1	PRIO_ATEGB	P40246	ateles geof
43	236	97.5	252	1	PRIO_CALJA	P40247	callithrix
44	235	97.1	239	1	PRIO_AOTTR	P40245	aotus trivi
45	235	97.1	240	2	Q8VHV4	Q8VHV4	microtus ag

ALIGNMENTS

RESULT 1
PRIO_HYLLA STANDARD; PRT; 253 AA.
ID PRIO_HYLLA
AC P61766; P40253;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PrP;
OS Hylobates lar (Common gibbon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
OX NCBI_TaxID=9580;
RN [1]
RP MEDLINE=5139066; PubMed=7837269;
RX Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL: U08299; AAC50088.1; -
CC PIR: S53617; S53617.
CC HSSP: P04156; 114M.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prion octapep; 6.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC GLYCOPROTEIN: GPI-anchor, Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL
CC CHAIN 1 22 By similarity.
CC PROPEP 23 230 Major prion protein.
CC PROPEP 231 253 Removed in mature form (By similarity).
CC LIPID 230 230 GPI-anchor amidated serine (By
CC similarity).

FT DISULFID 179 214 By similarity.
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 51 91 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 51 59 0.
 FT REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 FT REPEAT 76 83 3.
 FT REPEAT 84 91 4.
 SQ SEQUENCE 253 AA; 27633 MW; C8F59F040996B74 CRC64;

Query Match 100.0%; Score 242; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 2e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
 Db 170 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 2

PRIO_HYLSY STANDARD; PRT; 253 AA.
 AC P61767; P40253;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN Name=PRNP;
 OS Hylobates syndactylus (Siamang) (Symphalangus syndactylus).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hylobatidae; Hylobates.
 RN NCBI_TaxID=9590;
 [1]

SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.

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EMBL; U08308; AAC50096.1; -
 DR PIR; S53635; S53635.
 DR HSSP; P04156; 114M.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 22 By similarity.
 FT CHAIN 23 230 Major prion protein.
 FT PROPEP 231 253 Removed in mature form (By similarity).

FT LIPID 230 230 GPI-anchor amidated serine (By
 FT similarity).
 FT DISULFID 179 214 By similarity.
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 51 91 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 51 59 0.
 FT REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 FT REPEAT 76 83 3.
 FT REPEAT 84 91 4.
 SQ SEQUENCE 253 AA; 27633 MW; C8F59F040996B74 CRC64;

Query Match 100.0%; Score 242; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 2e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 46
 Db 170 SSONNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQMC 215

RESULT 3

PRIO_PANTR STANDARD; PRT; 253 AA.
 AC P61768; P40253;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
 GN Name=PRNP;
 OS Pan troglodytes (Chimpanzee).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Pan.
 RN NCBI_TaxID=9598;
 [1]

SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru,
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.

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EMBL; U08296; AAC50085.1; -
 DR EMBL; U15039; AAA68632.1; -

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DR PIR; I61847, I61847.
DR HSSP; P04156; I14M.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion octapep; 6.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 230
FT PROPEP 231 253
FT LIPID 230 230
FT DISULFID 179 214
FT CARBOHYD 181 181
FT CARBOHYD 197 197
FT DOMAIN 51 91
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT REPEAT 84 91
SQ SEQUENCE 253 AA; 27633 MW; CR8F59F040996B74 CRC64;

Query Match
Best Local Similarity 100.0%; Score 242; DB 1; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQWCI 46
Db 170 SSQNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQWCI 215

RESULT 4
PRIO_CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercocebus atterimus, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U75384; AAB50623.1; -.
DR EMBL; U75382; AAB50623.1; -.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15
FT CHAIN 16 215
FT PROPEP 216 238
FT LIPID 215 215
FT DISULFID 164 199
FT CARBOHYD 166 166
FT CARBOHYD 182 182
FT DOMAIN 44 76
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3B531B CRC64;

Query Match
Best Local Similarity 98.8%; Score 239; DB 1; Length 238;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQWCI 46
Db 155 SSQNPFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQWCI 200

RESULT 5
PRIO_THEGE STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=Prp;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OC NCBI_TaxID=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.ldb-sib.ch/announce/>
CC or send an email to license@sib-sib.ch).

DR EMBL: U75383; AAC50630.1; -

DR HSSP: P23907; IG04.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00317; Prion; 1.

DR Pfam: PF03991; Prion octapep; 5.

DR PRINTS: PR00341; Prion.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

FT SIGNAL

FT NON_TER

FT SIGNAL

FT CHAIN

FT PROPEP

FT DISULFID

FT LIPID

FT CARBOHYD

FT CARBOHYD

FT DOMAIN

FT REPEAT

FT REPEAT

FT REPEAT

FT REPEAT

FT NON_TER

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Query Match
Best Local Similarity 97.8%; Score 239; DB 2; Length 238;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

DR EMBL: U75383; AAC50630.1; -

DR HSSP: P23907; IG04.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00317; Prion; 1.

DR Pfam: PF03991; Prion octapep; 5.

DR PRINTS: PR00341; Prion.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

FT SIGNAL

FT NON_TER

FT SIGNAL

FT CHAIN

FT PROPEP

FT DISULFID

FT LIPID

FT CARBOHYD

FT CARBOHYD

FT DOMAIN

FT REPEAT

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Query Match
Best Local Similarity 97.8%; Score 239; DB 2; Length 238;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

DR EMBL: U75383; AAC50630.1; -

DR HSSP: P23907; IG04.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00317; Prion; 1.

DR Pfam: PF03991; Prion octapep; 5.

DR PRINTS: PR00341; Prion.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

FT SIGNAL

FT NON_TER

FT SIGNAL

FT CHAIN

FT PROPEP

FT DISULFID

FT LIPID

FT CARBOHYD

FT CARBOHYD

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FT REPEAT

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FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;

Query Match 98.8%; Score 239; DB 1; Length 241;
Best Local Similarity 97.8%; Pred. No. 4.5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 46
Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 208

RESULT 8
PRIO_MANSP STANDARD; PRT; 241 AA.
ID PRIO_MANSP
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Mandrilus sphinx (Mandrill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Mandrilus.
OX NCBI_TaxID=9561;
RN [1]
SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08303; AAC50091.1; -.
DR PIR; S71056; S71056.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION 2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT SIGNAL <1 15
FT CHAIN 16 223 By similarity.
FT PROPEP 224 >241 Major prion protein.
FT LIPID 223 223 Removed in mature form (By similarity).
FT DISULFID 172 207 GPI-anchor amidated serine (By
FT CARBOHYD 174 174 similarity).
N-linked (GlcNAc... ) (Potential).

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FT CARBOHYD 190 190 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 77 84 4.
FT NON_TER 241 241 5.
SQ SEQUENCE 241 AA; 26398 MW; E53D84E2B59DE CRC64;

Query Match 98.8%; Score 239; DB 1; Length 241;
Best Local Similarity 97.8%; Pred. No. 4.5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 46
Db 163 SNONNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 208

RESULT 9
PRIO_CERAE STANDARD; PRT; 245 AA.
ID PRIO_CERAE
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OS Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534, 36224;
RN [1]
SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08291; AAC50080.1; -.
DR EMBL; U08292; AAC50081.1; -.
DR PIR; S53627; S53627.
DR PIR; S71045; S71045.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION 2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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Query Match	Best Local Similarity	Score 239, DB 1, Length 246;
Matches 45; Conservative	97.8%;	Pred. No. 4,66-22;
	1; Mismatches 0; Indels 0; Gaps 0	

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RESULT 10
PRIO_CERMO
ID PRIO_CERMO STANDARD; PRT; 246 AA.
AC P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRN;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
RN NCBI_TaxId=36226;
RP [1]
SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC boer genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jacob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC -----
DR EMBL; U75386; AAB50625.1; -.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03971; Prion; 1.
DR Pfam; PF03991; Prion.octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS000291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.

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Db 163 SKONNFVHDCVNITIKOHTVTTTNGENFETDVKMRERVVEQMC1 208

RESULT 11

ID PRIO CERNE STANDARD; PRT; 246 AA.

AC P61762; Q95172; Q95173;

DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 05-JUL-2004 (Rel. 44, Last annotation update)

DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).

OS Name=PRNP;

GN Cerepithhecus neglectus (Debrazza's monkey).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;

OC Cercopithecinae; Cercopithecus.

NCBI_TaxID=36227;

LN [1]

RP SEQUENCE FROM N.A.

RA van der Kuyl A.C., Dekker J.T., Goudamit J.;

RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion.";

RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.

CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.

CC -1- SIMILARITY: Belongs to the prion family.

CC -----

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CC -----

DR EMBL; U75387; AAB50626.1; -.

DR HSBP; P23907; G04.

DR InterPro; IPR000817; Prion.

DR Pfam; PF00377; Prion; 1.

DR Pfam; PF03991; Prion_octapep; 6.

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DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;

Query Match 98.8%; Score 239; DB 1; Length 246;
Best Local Similarity 97.8%; Pred. No. 4.6e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 SSONNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCI 46
Db 163 SNONNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCI 208

RESULT 12
PRIO_CERTO STANDARD; PRT; 246 AA.
ID PRIO_CERTO
AC 095176;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U75385; AAB50628.1; -.
CC HSSP; P23907; I604.

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DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26914 MW; F58679CBBEC5ADC7 CRC64;

Query Match 98.8%; Score 239; DB 1; Length 246;
Best Local Similarity 97.8%; Pred. No. 4.6e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 SSONNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCI 46
Db 163 SNONNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCI 208

RESULT 13
PRIO_ERYPA STANDARD; PRT; 246 AA.
ID PRIO_ERYPA
AC 095174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Erythrocybus patas (Red guenon) (Cercopithecus patas).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Erythrocybus.
OX NCBI_TaxID=9538;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----

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CC EMBL; U75388; AAB50627.1; -.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00344; PRION.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION 2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT NON_TER 1 1
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26886 MW; D35D105BBEC53108 CRC64;

Query Match
Best Local Similarity 98.8%; Score 239; DB 1; Length 246;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETEDVKKMERVVEQNCI 46
DB 163 SSONNFVHDCVNIITIKOHTVTTTGGNFETEDVKKMERVVEQNCI 208

RESULT 14
AAO83636 PRELIMINARY; PRT; 246 AA.
ID AAO83636
AC AAO83636
DT 02-MAR-2004 (TRENBLrel. 27, Created)
DT 02-MAR-2004 (TRENBLrel. 27, Last sequence update)
DE 02-MAR-2004 (TRENBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RT "Polymorphisms of the prion protein gene in Korea.";
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
KW EMBL; AY219883; AAO83636.1; -.
FT SIGNAL 1 1
FT NON_TER 1 1
FT NON_TER 246 246
SQ SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;

Query Match
Best Local Similarity 98.8%; Score 239; DB 2; Length 246;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETEDVKKMERVVEQNCI 46
DB 163 SSONNFVHDCVNIITIKOHTVTTTGGNFETEDVKKMERVVEQNCI 208

RESULT 15
PRIO_CEBAP STANDARD; PRT; 252 AA.
ID PRIO_CEBAP

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AC P40249;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP.
OS Cebus apella (Brown-capped capuchin).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
OX NCBI_TaxID=9515;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISRASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation-
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (see http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08295; AAC50084.1; -.
DR PIR; S53631; S53631.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00344; PRION.
DR PROSITE; PS00291; PRION 1; 1.
DR PROSITE; PS00706; PRION 2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;

Query Match
Best Local Similarity 98.8%; Score 239; DB 1; Length 252;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNIITIKOHTVTTTGGNFETEDVKKMERVVEQNCI 46
DB 169 SSONNFVHDCVNIITIKOHTVTTTGGNFETEDVKKMERVVEQNCI 214

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Fri Dec 3 10:54:05 2004

us-10-031-975-2_copy_176_221.rup

Page 9

Job time : 74.3541 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSQNNFVHDCVNTTKQHTV.....ENFTEDVAKMERVVEQMC1 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: /cgn2_6/ptodata/1/iaa/5A COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCOTUS COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	242	100.0	253	4	US-09-431-887-2
2	242	100.0	253	4	US-09-431-887-8
3	242	100.0	253	4	US-09-431-887-19
4	239	98.8	253	4	US-08-556-823-10
5	239	98.8	245	4	US-09-431-887-5
6	239	98.8	245	4	US-09-431-887-15
7	239	98.8	252	4	US-09-431-887-17
8	239	98.8	253	4	US-08-242-188-2
9	239	98.8	253	1	US-08-509-261A-2
10	239	98.8	253	1	US-08-660-626-8
11	239	98.8	253	1	US-08-692-892-2
12	239	98.8	253	2	US-08-713-939A-2
13	239	98.8	253	2	US-08-868-162A-22
14	239	98.8	253	2	US-09-031-168-8
15	239	98.8	253	3	US-09-128-450-20
16	239	98.8	253	3	US-09-036-579-2
17	239	98.8	253	3	US-09-823-494-20
18	239	98.8	253	3	US-09-550-374-2
19	239	98.8	253	4	US-09-431-887-1
20	239	98.8	253	4	US-09-431-887-3
21	239	98.8	253	4	US-09-431-887-4
22	239	98.8	253	4	US-09-431-887-7
23	239	98.8	253	4	US-09-431-887-9
24	239	98.8	253	4	US-09-431-887-10
25	239	98.8	253	4	US-09-431-887-11
26	239	98.8	253	4	US-09-431-887-12
27	239	98.8	253	4	US-09-431-887-14

28	239	98.8	253	4	US-09-431-887-16	Sequence 16, Appl
29	239	98.8	253	4	US-09-431-887-18	Sequence 18, Appl
30	239	98.8	253	4	US-09-943-906-2	Sequence 2, Appl
31	239	98.8	253	4	US-09-669-516C-8	Sequence 8, Appl
32	239	98.8	253	4	US-09-919-172-57	Sequence 57, Appl
33	239	98.8	253	4	US-09-976-594-72	Sequence 72, Appl
34	239	98.8	253	4	US-09-904-987-3	Sequence 3, Appl
35	239	98.8	254	1	US-08-424-188-1	Sequence 1, Appl
36	238	98.3	254	1	US-08-509-261A-1	Sequence 1, Appl
37	238	98.3	254	1	US-08-660-626-7	Sequence 7, Appl
38	238	98.3	254	1	US-08-692-892-1	Sequence 1, Appl
39	238	98.3	254	2	US-08-713-939A-1	Sequence 1, Appl
40	238	98.3	254	2	US-08-868-162A-21	Sequence 21, Appl
41	238	98.3	254	3	US-09-031-168-7	Sequence 7, Appl
42	238	98.3	254	3	US-09-128-450-19	Sequence 19, Appl
43	238	98.3	254	3	US-09-128-450-28	Sequence 28, Appl
44	238	98.3	254	3	US-09-036-579-1	Sequence 1, Appl
45	238	98.3	254	3	US-09-823-494-19	Sequence 19, Appl

ALIGNMENTS

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RESULT 1
US-09-431-887-2
; Sequence 2, Application US/09431887
; Patent No. 6534036
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 2
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Pan troglodytes
US-09-431-887-2

Query Match      100.0%; Score 242; DB 4; Length 253;
Best Local Similarity 100.0%; Pred. No. 9,8e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 SSQNNFVHDCVNTTKQHTVTTTKGENTETDVAKMERVVEQMC1 46
Db      170 SSQNNFVHDCVNTTKQHTVTTTKGENTETDVAKMERVVEQMC1 215

RESULT 2
US-09-431-887-8
; Sequence 8, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 8
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Hylobates sp.
US-09-431-887-8

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Query Match

Best Local Similarity 100.0%; Score 242; DB 4; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 170 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 3

US-09-431-887-19

Sequence 19, Application US/09431887

Patent No. 6534036

GENERAL INFORMATION:

APPLICANT: D-Gen Limited

TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE

FILE REFERENCE: ICOT/P21952

CURRENT APPLICATION NUMBER: US/09/431,887

PRIOR FILING DATE: 1999-11-02

PRIOR APPLICATION NUMBER: GB 9824091.4

NUMBER OF SEQ ID NOS: 37

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 19

LENGTH: 253

TYPE: PRT

ORGANISM: Hylobates syndactylus

US-09-431-887-19

Query Match

Best Local Similarity 100.0%; Score 242; DB 4; Length 253;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 170 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 4

US-08-556-823-10

Sequence 10, Application US/08556823

Patent No. 5750361

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko

APPLICANT: Fred R. Cohen

TITLE OF INVENTION: Formation and use of prion protein

NUMBER OF SEQUENCES: 10

CORRESPONDENCE ADDRESS:

ADDRESS: Fish & Richardson

STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Acciti

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/556,823

FILING DATE:

CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:

LENGTH: 142 amino acids

TYPE: amino acid

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-556-823-10

Query Match

Best Local Similarity 98.8%; Score 239; DB 1; Length 142;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 81 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 126

RESULT 5

US-09-431-887-5

Sequence 5, Application US/09431887

Patent No. 6534036

GENERAL INFORMATION:

APPLICANT: D-Gen Limited

TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE

FILE REFERENCE: ICOT/P21952

CURRENT APPLICATION NUMBER: US/09/431,887

PRIOR FILING DATE: 1999-11-02

PRIOR APPLICATION NUMBER: GB 9824091.4

NUMBER OF SEQ ID NOS: 37

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 5

LENGTH: 245

TYPE: PRT

ORGANISM: Cercopithecus aethiops

US-09-431-887-5

Query Match

Best Local Similarity 98.8%; Score 239; DB 4; Length 245;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 162 SSQNNFVHDCVNTTKKHQHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 6

US-09-431-887-15

Sequence 15, Application US/09431887

Patent No. 6534036

GENERAL INFORMATION:

APPLICANT: D-Gen Limited

TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE

FILE REFERENCE: ICOT/P21952

CURRENT APPLICATION NUMBER: US/09/431,887

PRIOR FILING DATE: 1999-11-02

PRIOR APPLICATION NUMBER: GB 9824091.4

NUMBER OF SEQ ID NOS: 37

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 15

LENGTH: 245

TYPE: PRT

ORGANISM: Cercopithecus diana

US-09-431-887-15

Query Match

Best Local Similarity 98.8%; Score 239; DB 4; Length 245;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 46
|:|||||||||||||||||||||||||||||||||||||
Db 162 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 207

RESULT 7
US-09-431-887-17
Sequence 17, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 17
LENGTH: 252
TYPE: PR1
ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 98.8%; Score 239; DB 4; Length 252;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 46
|:|||||||||||||||||||||||||||||||||||||
Db 169 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 214

RESULT 8
US-08-242-188-2
Sequence 2, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-0875
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid

STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 98.8%; Score 239; DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 46
|:|||||||||||||||||||||||||||||||||||||
Db 170 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 215

RESULT 9
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bosicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-2

Query Match 98.8%; Score 239; DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 46
|:|||||||||||||||||||||||||||||||||||||
Db 170 SSONNFVHDCVNTTIKQHTVTTTGGNFETDVKKMERVVEQMC1 215

RESULT 10
US-08-660-626-8

Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-660-626-8

Query Match 98.8%; Score 239, DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2, 6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 SSNNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQMC1 46
170 SNQNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQMC1 215

RESULT 11
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-692-892-2

Query Match 98.8%; Score 239, DB 1; Length 253;
Best Local Similarity 97.8%; Pred. No. 2, 6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 SSNNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQMC1 46
170 SNQNFVHDCVNITIKQHTVTTTNGENFTETDVKKMERVVEQMC1 215

RESULT 12
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:

LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 98.8%; Score 239; DB 2; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 46
DB 170 SSNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 215

RESULT 13

US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 596269

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA

ZIP: 94301

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS

SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A

FILING DATE: 03-JUN-1997

CLASSIFICATION: 536

PRIOR APPLICATION DATA:
APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 6510-083001

TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400

TELEFAX: 650 327-3231

TELEX:

INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

ORIGINAL SOURCE:

ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 98.8%; Score 239; DB 2; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 46
DB 170 SSNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 215

RESULT 14

US-09-031-168-8
Sequence 8, Application US/09031168

Patent No. 6150583

GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner

APPLICANT: Glenn C. Telling

APPLICANT: Michael R. Scott

TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
EPIITOPIC-TAGGED PROTEINS

NUMBER OF SEQUENCES: 13

CORRESPONDENCE ADDRESSES:

ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park

STATE: California

COUNTRY: USA

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Acclii

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626

FILING DATE:

ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg

REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875

INFORMATION FOR SEQ ID NO: 8:

SEQUENCE CHARACTERISTICS:

LENGTH: 253 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 98.8%; Score 239; DB 3; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 46
DB 170 SSNNFVHDCVNTIKQHTVTTTGGNFETEDVKMERVVEQWCI 215

RESULT 15

US-09-128-450-20
Sequence 20, Application US/09128450

Patent No. 6211149

GENERAL INFORMATION:

APPLICANT: Chesebro, Bruce W

APPLICANT: Chabry, Joelle

APPLICANT: Priola, Subette

TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121

CURRENT APPLICATION NUMBER: US/09/128,450

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; CURRENT FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 20
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-128-450-20

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Query Match          98.8%; Score 239; DB 3; Length 253;
Best Local Similarity 97.8%; Pred. No. 2.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 SSONNFVHDCVNTTITKQHTVTTTIGENFTETDVKMERVVEQWCI 46
Db 170 SNNNFVHDCVNTTITKQHTVTTTIGENFTETDVKMERVVEQWCI 215

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Search completed: December 3, 2004, 00:18:55
Job time : 17.4197 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Comugen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-2_COPY_176_221

Perfect score: 242
Sequence: 1 SSQNNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQWCI 46

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB.pdp:*
- 2: /cgn2_6/ptodata/1/pubppaa/PCT_NEW_PUB.pdp:*
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- 10: /cgn2_6/ptodata/1/pubppaa/US09C_PUBCOMB.pdp:*
- 11: /cgn2_6/ptodata/1/pubppaa/US09C_PUBCOMB.pdp:*
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- 16: /cgn2_6/ptodata/1/pubppaa/US10E_PUBCOMB.pdp:*
- 17: /cgn2_6/ptodata/1/pubppaa/US10F_NEW_PUB.pdp:*
- 18: /cgn2_6/ptodata/1/pubppaa/US11_NEW_PUB.pdp:*
- 19: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB.pdp:*
- 20: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB.pdp:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	242	100.0	253	14	US-10-304-630-2
2	242	100.0	253	14	US-10-304-630-8
3	242	100.0	253	14	US-10-304-630-19
4	242	100.0	254	14	US-10-301-488A-23
5	242	100.0	254	15	US-10-301-448-23
6	239	98.8	117	14	US-10-050-902-348
7	239	98.8	117	14	US-10-050-898-348
8	239	98.8	117	14	US-10-346-190-89
9	239	98.8	141	16	US-10-612-356A-1
10	239	98.8	162	9	US-09-745-003-10
11	239	98.8	163	14	US-10-104-047-2013
12	239	98.8	200	16	US-10-470-848-10
13	239	98.8	208	16	US-10-470-848-3

14	239	98.8	208	17	US-10-745-393-1	Sequence 1, Appl1
15	239	98.8	245	14	US-10-304-630-5	Sequence 5, Appl1
16	239	98.8	245	14	US-10-304-630-15	Sequence 15, Appl1
17	239	98.8	252	14	US-10-304-630-17	Sequence 17, Appl1
18	239	98.8	253	9	US-09-823-494-20	Sequence 20, Appl1
19	239	98.8	253	9	US-09-904-987-3	Sequence 3, Appl1
20	239	98.8	253	9	US-09-919-172-57	Sequence 57, Appl1
21	239	98.8	253	9	US-09-943-906-2	Sequence 2, Appl1
22	239	98.8	253	14	US-10-304-630-1	Sequence 1, Appl1
23	239	98.8	253	14	US-10-304-630-3	Sequence 3, Appl1
24	239	98.8	253	14	US-10-304-630-4	Sequence 4, Appl1
25	239	98.8	253	14	US-10-304-630-7	Sequence 7, Appl1
26	239	98.8	253	14	US-10-304-630-9	Sequence 9, Appl1
27	239	98.8	253	14	US-10-304-630-10	Sequence 10, Appl1
28	239	98.8	253	14	US-10-304-630-11	Sequence 11, Appl1
29	239	98.8	253	14	US-10-304-630-12	Sequence 12, Appl1
30	239	98.8	253	14	US-10-304-630-14	Sequence 14, Appl1
31	239	98.8	253	14	US-10-304-630-16	Sequence 16, Appl1
32	239	98.8	253	14	US-10-304-630-18	Sequence 18, Appl1
33	239	98.8	253	14	US-10-301-488A-21	Sequence 21, Appl1
34	239	98.8	253	14	US-10-301-488A-32	Sequence 32, Appl1
35	239	98.8	253	14	US-10-301-488A-32	Sequence 32, Appl1
36	239	98.8	253	14	US-10-410-907A-8	Sequence 8, Appl1
37	239	98.8	253	14	US-10-346-190-79	Sequence 79, Appl1
38	239	98.8	253	14	US-10-435-602-2	Sequence 2, Appl1
39	239	98.8	253	15	US-10-301-448-21	Sequence 21, Appl1
40	239	98.8	253	15	US-10-301-448-22	Sequence 22, Appl1
41	239	98.8	253	15	US-10-301-448-32	Sequence 32, Appl1
42	239	98.8	253	16	US-10-648-593-151	Sequence 151, Appl1
43	239	98.8	253	16	US-10-470-848-2	Sequence 2, Appl1
44	239	98.8	253	16	US-10-772-656-54	Sequence 54, Appl1
45	239	98.8	592	17	US-10-745-393-3	Sequence 3, Appl1

ALIGNMENTS

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RESULT 1
US-10-304-630-2
; Sequence 2, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OR INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Pan troglodytes
US-10-304-630-2

Query Match      100.0%; Score 242; DB 14; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy      1  SSQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQWCI 46
      |||
Db      170 SSQNNFVHDCVNITIKQHTVTTTGGKGFETDVKMERVVEQWCI 215

RESULT 2
US-10-304-630-8
; Sequence 8, Application US/10304630
; Publication No. US20030161836A1

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/ GENERAL INFORMATION:
/ APPLICANT: D-Gen Limited
/ TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
/ FILE REFERENCE: ICOT/P21952
/ CURRENT APPLICATION NUMBER: US/10/304,630
/ PRIOR FILING DATE: 2002-11-26
/ PRIOR APPLICATION NUMBER: US/09/431,887
/ PRIOR FILING DATE: 1999-11-02
/ PRIOR APPLICATION NUMBER: GB 9824091.4
/ NUMBER OF SEQ ID NOS: 37
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 8
/ LENGTH: 253
/ TYPE: PRT
/ ORGANISM: Hylobates sp.
US-10-304-630-8

Query Match          100.0%; Score 242; DB 14; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 46
Db 170 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 215

RESULT 3
US-10-304-630-19
/ Sequence 19, Application US/10304630
/ Publication No. US20030161836A1
/ GENERAL INFORMATION:
/ APPLICANT: D-Gen Limited
/ TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
/ FILE REFERENCE: ICOT/P21952
/ CURRENT APPLICATION NUMBER: US/10/304,630
/ PRIOR FILING DATE: 2002-11-26
/ PRIOR APPLICATION NUMBER: US/09/431,887
/ PRIOR FILING DATE: 1999-11-02
/ PRIOR APPLICATION NUMBER: GB 9824091.4
/ NUMBER OF SEQ ID NOS: 37
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 19
/ LENGTH: 253
/ TYPE: PRT
/ ORGANISM: Hylobates syndactylus
US-10-304-630-19

Query Match          100.0%; Score 242; DB 14; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 46
Db 170 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 215

RESULT 4
US-10-301-488A-23
/ Sequence 23, Application US/10301488A
/ Publication No. US2003016558A1
/ GENERAL INFORMATION:
/ APPLICANT: FRANGIONE, Blas
/ APPLICANT: WISNIEWSKI, Thomas
/ APPLICANT: SIGURDSSON, Blinnar
/ TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
/ TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
/ TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
/ FILE REFERENCE: 5986/1K434US1

CURRENT APPLICATION NUMBER: US/10/301,488A
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/331,801
PRIOR FILING DATE: 2001-11-21
SOFTWARE: PatentIn version 3.1
SEQ ID NO 23
LENGTH: 254
TYPE: PRT
ORGANISM: Chimpanzee
US-10-301-448-23

Query Match          100.0%; Score 242; DB 15; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 46
Db 170 SSQNNFVHDCVNITIKOHTVTTTGGKGFETDVKMERVVEQWCI 215

RESULT 5
US-10-050-902-348
/ Sequence 348, Application US/10050902
/ Publication No. US20030175290A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tiesoc, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Sebbel, Peter
/ APPLICANT: Ploesek, Christine
/ TITLE OF INVENTION: Molecular Antigen Array
/ FILE REFERENCE: 1700 0190004
/ CURRENT APPLICATION NUMBER: US/10/050,902
/ CURRENT FILING DATE: 2002-01-18
/ PRIOR APPLICATION NUMBER: US 60/262,379
/ PRIOR FILING DATE: 2001-01-19
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PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348

Query Match 98.8%; Score 239; DB 14; Length 117;
Best Local Similarity 97.8%; Pred. No. 9.1e-24;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 49 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 7

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003015711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 98.8%; Score 239; DB 14; Length 117;
Best Local Similarity 97.8%; Pred. No. 9.1e-24;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 49 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 8

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 98.8%; Score 239; DB 14; Length 117;
Best Local Similarity 97.8%; Pred. No. 9.1e-24;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 49 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 9

US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US2004013093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-612-356A-1

Query Match 98.8%; Score 239; DB 16; Length 141;
Best Local Similarity 97.8%; Pred. No. 1.1e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SSQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46
Db 81 SNQNNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 126

RESULT 10
US-09-745-003-10
Sequence 10, Application US/09745003

Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins, Related Reagents
FILE REFERENCE: PEP2
CURRENT APPLICATION NUMBER: US/09/745,003
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match
Best Local Similarity 98.8%; Score 239; DB 9; Length 162;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 79 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 124

RESULT 11
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
PRIOR FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2013
LENGTH: 163
TYPE: PRT
ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match
Best Local Similarity 98.8%; Score 239; DB 14; Length 163;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 80 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 125

RESULT 12
US-10-470-848-10
Sequence 10, Application US/10470848
Publication No. US20040137421A1
GENERAL INFORMATION:
APPLICANT: President of Tohoku University
TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
FILE REFERENCE: PH-1224-PCF
CURRENT APPLICATION NUMBER: US/10/470,848
PRIOR FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: JP 2001-24279
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 200
TYPE: PRT
ORGANISM: Homo sapiens
US-10-470-848-10

Query Match
Best Local Similarity 98.8%; Score 239; DB 16; Length 200;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 140 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 185

RESULT 13
US-10-470-848-3
Sequence 3, Application US/10470848
Publication No. US20040137421A1
GENERAL INFORMATION:
APPLICANT: President of Tohoku University
TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
FILE REFERENCE: PH-1224-PCF
CURRENT APPLICATION NUMBER: US/10/470,848
PRIOR FILING DATE: 2003-07-31
PRIOR APPLICATION NUMBER: JP 2001-24279
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 3
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-10-470-848-3

Query Match
Best Local Similarity 98.8%; Score 239; DB 16; Length 208;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46
DB 148 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 193

RESULT 14
US-10-745-393-1

Sequence 1, Application US/10745393
Publication No. US20040203131A1
GENERAL INFORMATION:
APPLICANT: Faatz, Elke
APPLICANT: Stock, Werner
APPLICANT: Scharschmidt, Peter
TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
FILE REFERENCE: 12290 US3 (9793/141)
CURRENT APPLICATION NUMBER: US/10/745,393
PRIOR FILING DATE: 2003-12-23
PRIOR APPLICATION NUMBER: EP 0115225.3
PRIOR FILING DATE: 2001-06-22
PRIOR APPLICATION NUMBER: EP 01120939.2
PRIOR FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: US 10/167,774
PRIOR FILING DATE: 2002-06-10
PRIOR APPLICATION NUMBER: US 10/179,905
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 208
TYPE: PRT
ORGANISM: Homo sapiens
US-10-745-393-1

Query Match
Best Local Similarity 98.8%; Score 239; DB 17; Length 208;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNTIKOHTVTTTGGNFETDVKMERVVEQMC1 46

DB 148 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMC1 193

RESULT 15
US-10-304-630-5

; Sequence 5, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-10-304-630-5

Query Match 98.8%; Score 239; DB 14; Length 245;
Best Local Similarity 97.8%; Pred. No. 2.2e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SSQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMC1 46
DB 162 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQMC1 207

Search completed: December 3, 2004, 01:07:45
Job time : 55.4459 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193

Sequence: 1 NNPHVDCVNTIKQHTVTTTGTGENTETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_235sep04:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	193	100.0	117	5	ABG94357 Modified
2	193	100.0	117	5	ABG80669 Human pri
3	193	100.0	117	7	ADD24196 Modified
4	193	100.0	124	5	ABG94340 Mouse mpr
5	193	100.0	124	5	ABG80652 Mouse tru
6	193	100.0	124	7	ADD24200 mPr-EK-
7	193	100.0	142	7	AAW17686 Priton pro
8	193	100.0	163	7	ADB63859 Human pri
9	193	100.0	200	5	ABG31907 Human pri
10	193	100.0	208	3	ABAB07316 Human pri
11	193	100.0	208	3	ABAB07318 Human pri
12	193	100.0	208	3	ABAB07327 Human pri
13	193	100.0	208	3	ABAB07329 Human pri
14	193	100.0	208	5	ABG31902 Human pri
15	193	100.0	208	5	ABG31904 Chimera-t
16	193	100.0	208	7	ADJ66133 Mouse pri
17	193	100.0	209	5	ABG31905 HCHV type
18	193	100.0	211	4	AAH30801 Amino aci
19	193	100.0	225	6	ABR42793 Rat prion
20	193	100.0	226	7	ADB85240 Monkey pr
21	193	100.0	245	4	AAH72342 Cercopith
22	193	100.0	245	4	AAH72352 Cercopith
23	193	100.0	253	2	AAH6715 Human pri
24	193	100.0	253	2	AAH69660 Human pri
25	193	100.0	253	2	AAH85901 Human pri

ALIGNMENTS

26	193	100.0	253	2	AAH07994 Human pri
27	193	100.0	253	3	AAH81485 Human pri
28	193	100.0	253	3	AAH06272 Human pri
29	193	100.0	253	3	AAH15035 Human pri
30	193	100.0	253	4	AAH72339 Chimpanze
31	193	100.0	253	4	AAH72347 Priton pro
32	193	100.0	253	4	AAH72353 Guereza p
33	193	100.0	253	4	AAH72344 Rhesus mo
34	193	100.0	253	4	AAH72345 Gibbon pr
35	193	100.0	253	4	AAH72350 Marmoset
36	193	100.0	253	4	AAH72351 Hamadryas
37	193	100.0	253	4	AAH72348 Priton pro
38	193	100.0	253	4	AAH72356 Siamaing p
39	193	100.0	253	4	AAH72346 Priton pro
40	193	100.0	253	4	AAH72355 Priton pro
41	193	100.0	253	4	AAH72349 Priton pro
42	193	100.0	253	4	AAH72340 Orangutan
43	193	100.0	253	4	AAH72338 Human pri
44	193	100.0	253	4	AAH72354 Capuchin
45	193	100.0	253	4	AAH72341 Gorilla p

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
XX Homo sapiens.
XX
XX WO200256905-A2.
XX
XX 25-JUL-2002.
XX
XX 21-JAN-2002; 2002WO-IB000166.
XX
XX 19-JAN-2001; 2001US-0262379P.
XX
XX 04-MAY-2001; 2001US-0288549P.
XX
XX 05-OCT-2001; 2001US-0326998P.
XX
XX 07-NOV-2001; 2001US-0331045P.
XX
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
XX Ploesek C;
XX WPI; 2002-627351/67.
XX
XX Molecular antigen array used in the production of vaccines for infectious
XX diseases.
XX
XX Disclosure; Page 441; 441pp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organism comprising
XX at least one first attachment site, where the organism is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with the antigen
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant beta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antileptotic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC

SO Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36

Db 52 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 87

RESULT 2

ABG80669 1D ABG80669 standard; protein; 117 AA.

XX ABG80669;

DT 29-NOV-2002 (first entry)

DE Human prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mitein;
 XX adult respiratory distress syndrome; 198-mediated allergic reaction; anaphylaxis;
 XX allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's disease;
 XX Grave's disease; systemic lupus erythematosus; osteoporosis;
 XX inflammatory immune disease; lymphadenopathy; multiple sclerosis;
 XX angiotumproliferative disease; lymphadenopathy; Alzheimer's disease;
 XX rheumatoid arthritis; diabetes; infectious disease; lymphadenopathy;
 XX enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.

PN WO200256907-A2.

PD 25-JUL-2002.

PF 21-JAN-2002; 2002WO-1B000168.

PR 19-JAN-2001; 2001US-0262379P.

PR 04-MAY-2001; 2001US-0288549P.

PR 05-OCT-2001; 2001US-0326998P.

PR 07-NOV-2001; 2001US-0331045P.

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (MAUR-) MAURER P.

PA (LECH-) LECHNER P.

PA (ORTM-) ORTMANN R.

PA (LUBO-) LUBOWITZ R.

PA (STAU-) STAUFENBIEL M.

PA (FREY-) FREY P.

PI Renner WA, Bachmann M, Tissot A, Seibel P, Piossek C;
 XX WPI; 2002-636514/68.
 DR
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant beta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antileptotic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC

SO Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36

Db 52 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 87

RESULT 3

ADD24196 1D ADD24196 standard; protein; 117 AA.

XX ADD24196;

DT 15-JAN-2004 (first entry)

DE Modified human prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;
 XX first attachment site; antigen; antigenic determinant; prion protein;
 XX PpP; PpP peptide; vaccine; neuroprotective; anti-inflammatory;
 XX Creutzfeldt-Jakob Disease; prion; mutant; mitein.

OS Synthetic.

PN WO2003059386-A2.

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003MO-EP000460.
 XX
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Felliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36
 DB 52 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 87
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002MO-IB000166.
 PF
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Sebbel P;
 PI Plosek C;
 XX
 XX WPI; 2002-627351/57.
 DR
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 PS Disclosure; Page 438; 441pp; English.
 XX
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the association to form an ordered and
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β subunit coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytosolic, used in
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36
 DB 53 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 88
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β 1-42; influenza; mutant;
 KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 XX 04-MAY-2001; 2001US-0286549P.
 PR 05-OCT-2001; 2001US-0326986P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUEO) LUEOBEND R.
 PA (STAU) STAUFENBIEL M.
 XX (FREY) FREY P.
 PI Maurer P, Lechner F, Ortmann R, Lueobend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tiesse A, Seibel P, Piossek C;
 DR WPI; 2002-636514/56.
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7, Page 415; 416pp; English.
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC origin; and (11) an organism comprising at least one first attachment
 CC site, where the organism is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the first attachment site; and (11) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (11) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site, and
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, allergic asthma,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy, immunoblastic
 CC angiodysplasia, immunoproliferative disease lymphadenopathy, rheumatoid
 CC arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).
 XX
 SQ Sequence 124 AA;
 CC
 CC Query Match 100.0%; Score 193; DB 5; Length 124;
 CC Best Local Similarity 100.0%; Pred. No. 8e-19;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFDVDCVNIITIKOHTVTTTGGNFETDVKKMER 36
 CC 53 NNFDVDCVNIITIKOHTVTTTGGNFETDVKKMER 88

RESULT 6
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrP-EK-Fc+ cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc+.
 XX
 OS Unidentified.
 OS prion.
 OS
 PN WO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA,
 PI WPI; 2003-598483/56.
 DR
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc+)
 CC which was used during the exemplification of the invention.
 XX
 SQ Sequence 124 AA;
 CC
 CC Query Match 100.0%; Score 193; DB 7; Length 124;
 CC Best Local Similarity 100.0%; Pred. No. 8e-19;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFDVDCVNIITIKOHTVTTTGGNFETDVKKMER 36
 CC 53 NNFDVDCVNIITIKOHTVTTTGGNFETDVKKMER 88
 CC
 CC RESULT 7
 CC ID AAM17686 standard; peptide; 142 AA.
 CC XX
 CC AC AAM17686;
 CC XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 XX
 XX Prion protein; PrP, alpha helical domain; screening; inhibition; binding;
 XX
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 XX Homo sapiens.
 OS
 PN MO9716728-A1.
 XX
 XX 09-MAY-1997.
 PD
 XX 28-OCT-1996; 96MO-US017462.
 PF
 XX 02-NOV-1995; 95US-00556623.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA
 PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 XX WPI; 1997-272248/24.
 DR
 XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 XX Claim 11; Page 7-38; 50pp; English.
 PS
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 193; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 9.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNPFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 36
 DB 84 NNPFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 119
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 XX Human protein encoded by clone ASTRO20055570.
 DB
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 XX Homo sapiens.
 OS
 PN EPI308459-A2.
 XX
 XX 07-MAY-2003.
 PD
 XX 28-MAR-2002; 2002EP-00007401.
 PF
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 XX WPI; 2003-450961/43.
 DR
 XX N-PDB; ADB61889.
 DR
 XX New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 XX Claim 1; Page; 222pp; English.
 PS
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 CC
 XX Sequence 163 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 1.1e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNPFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 36
 DB 83 NNPFVHDCVNITIKOHTVTTTGGKGFETDVKMMER 118
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 XX Human prion protein related peptide #6.
 DE
 XX Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 KM
 XX Homo sapiens.
 OS
 PN WO200261418-A1.
 XX
 XX 08-AUG-2002.
 PD
 XX

XX 31-JAN-2002; 2002MO-JP000803.
 PF 31-JAN-2001; 2001JP-00024279.
 PR (TOHO) UNIV TOHOKU.
 XX
 PA Kitamoto T, Miyoshi K, Mohri S;
 PI WPI; 2002-619277/66.
 DR
 XX Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Example 2; Page 63-64; 69pp; Japanese.
 XX
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention.
 CC
 SQ Sequence 200 AA;
 Query Match Best Local Similarity 100.0%; Score 193; DB 5; Length 200;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36
 DB 143 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 178
 ID AAB07316
 AC AAB07316; standard; protein; 208 AA.
 XX
 AC AAB07316;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Mouse prion protein sequence.
 XX
 KW Mouse; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Mus sp.
 XX
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note="Repeat region consisting of tandem repeats of
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PN WO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000897.
 XX
 PR 17-NOV-1998; 98FI-00002481.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PA
 PT Novel immunassay for prion protein, used for the determination of

XX Hope J, Barnard GJR, Birkett CR;
 PI WPI; 2000-387880/33.
 DR
 XX Novel immunassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 PS Disclosure; Page 41-42; 50pp; English.
 XX
 CC The present sequence is the mouse prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of transmissible
 CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match Best Local Similarity 100.0%; Score 193; DB 3; Length 208;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 36
 DB 150 NNFVHDCVNITIKQHTVTTTGGNFTETDVKKMER 185
 ID AAB07318
 AC AAB07318; standard; protein; 208 AA.
 XX
 AC AAB07318;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note="Repeat region consisting of tandem repeats of
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PN WO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000897.
 XX
 PR 17-NOV-1998; 98FI-00002481.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 PI WPI; 2000-387880/33.
 DR
 XX Novel immunassay for prion protein, used for the determination of

PT	transmissible spongiform encephalopathies in bovines.
XX	
PS	Disclosure: Page 43-44; 50pp; English.
CC	
XX	The present sequence is the human prion protein (PrP) sequence.
CC	Conversion of the normal cellular form of PrP into an aggregated,
CC	insoluble isoform is implicated in the pathogenesis of Transmissible
CC	Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC	Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC	and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC	this protein in body fluid or tissue samples may be captured by an assay
CC	of the present invention, in which a PrP epitope is measured by an
CC	antibody, which is then detected. The presence of PrP indicates TSE. PrP
CC	epitopes (AAB07320-B07326) are derived from the protease resistant core
CC	of PrP that is occluded when the PrP is in an aggregated state
XX	
SQ	Sequence 208 AA:
Query Match	100.0%; Score 193; DB 3; Length 208;
Best Local Similarity	100.0%; Pred. No. 1.5e-18;
Matches	36; Conservative 0; Mismatches 0; Indels 0; Gaps 0
Oy	1 NNFVHDCVNITIKOHTVTTTTEKGFETDVMKMR 36
Db	151 NNFVHDCVNITIKOHTVTTTTEKGFETDVMKMR 186
RESULT 12	
AAB07327	
ID	AAB07327 standard; protein; 208 AA.
XX	
AC	AAB07327;
XX	
DT	17-OCT-2000 (first entry)
XX	
DE	Mouse prion protein sequence.
XX	
KW	Mouse; prion protein; transmissible spongiform encephalopathy;
KM	bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX	
OS	Mus sp.
XX	
FH	Key
FT	Region
FT	37..68
FT	/note="Repeat region consisting of tandem repeats of
FT	repeat unit: PHGGGWGQ (AAB07319)"
FT	156..191
FT	Disulfide-bond
FT	Modified-site
FT	208
FT	/note="C-terminal phospho-inositol glycolipid membrane
FT	anchor (-GPI)"
XX	
PN	WO200029849-A1.
XX	
PD	25-MAY-2000.
XX	
PF	27-OCT-1999; 99WO-FI000896.
XX	
PR	17-NOV-1998; 98FI-00002480.
XX	
PA	(WALL-) WALLAC OY.
XX	
PA	(BBSR-) BBSRC OFFICE.
XX	
PI	Hope J, Barnard GJR, Birkett CR;
XX	
DR	WPI; 2000-399778/34.
XX	
PT	New immunoassay for prion protein, used for determination of
PT	transmissible spongiform encephalopathies in mammals, comprises specific
PT	capture antibody.
XX	
PS	Disclosure: Page 41-42; 50pp; English.
XX	
CC	The present sequence is the mouse prion protein (PrP) sequence.

CC	Conversion of the normal cellular form of PrP into an aggregated,
CC	insoluble isoform is implicated in the pathogenesis of Transmissible
CC	Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC	Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC	and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC	this protein in body fluid or tissue samples may be measured by an assay
CC	of the present invention, in which a PrP epitope is captured by an
CC	antibody, which is then detected. The presence of PrP indicates TSE. PrP
CC	cryptopes (AAB07320-B07326) are derived from the protease resistant core
CC	of PrP that is occluded when the PrP is in an aggregated state
XX	
SO	Sequence 208 AA:
Query Match	100.0%; Score 193; DB 3; Length 208;
Best Local Similarity	100.0%; Pval. No. 1.5e-18;
Matches 36; Conservative	0; Mismatches 0; Indels 0; Gaps 0
Oy	1 NNPFVHDCVNITIKOHTVTYTTTKGENFTETDYKMMER 36
Dd	150 NNFVHDCVNITIKOHTVTYTTTKGENFTETDYKMMER 185
RESULT 13	
ID	AAB07329 standard; protein; 208 AA.
XX	
AC	AAB07329;
XX	
DT	17-OCT-2000 (first entry)
DE	
ME	Human prion protein sequence.
XX	
KW	Human; prion protein; transmissible spongiform encephalopathy;
KW	bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX	
OS	Homo sapiens.
XX	
FH	Key
FT	Region
FT	/note= "Repeat region consisting of tandem repeats of
FT	repeat unit: PHGGGWGQ (AAB07319)"
FT	Disulfide-bond 157..192
FT	Modified-site 208
FT	/note= "C-terminal phospho-inositol glycolipid membrane
FT	anchor (- GPI)"
XX	
PN	WO200029849-A1.
XX	
PD	25-MAY-2000.
XX	
PP	27-OCT-1999; 99WO-FI000896.
XX	
PR	17-NOV-1998; 98FI-00002480.
XX	
PA	(WALL-) WALLAC OY.
PA	(BBSR-) BBSRC OFFICE.
XX	
PI	Hope J, Barnard GJR, Birkec CR;
XX	
DR	WPI. 2000-399778/34.
XX	
PT	New immunoassay for prion protein, used for determination of
PT	transmissible spongiform encephalopathies in mammals, comprises specific
PT	capture antibody.
XX	
PS	Disclosure; Page 43-44; 50pp; English.
XX	
CC	The present sequence is the human prion protein (PrP) sequence.
CC	Conversion of the normal cellular form of PrP into an aggregated,
CC	insoluble isoform is implicated in the pathogenesis of Transmissible
CC	Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC	Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC	and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC	this protein in body fluid or tissue samples may be measured by an assay
CC	of the present invention, in which a PrP epitope is captured by an
CC	antibody, which is then detected. The presence of PrP indicates TSE. PrP
CC	cryptopes (AAB07320-B07326) are derived from the protease resistant core
CC	of PrP that is occluded when the PrP is in an aggregated state

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (A807320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36
 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 186

RESULT 14
 ABG31902
 ID ABG31902 standard; protein; 208 AA.
 AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 OS Homo sapiens.

PN W0200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36
 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 186

RESULT 15
 ABG31904
 ID ABG31904 standard; protein; 208 AA.
 AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimeric-type prion protein #2.

KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 OS Synthetic.

PN W0200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNIV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.
 PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

DB 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 36
 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKKMER 186

Search completed: December 3, 2004, 00:55:37
 Job time : 59.6066 sec

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITTKQHTVTTTGGNFETDVKMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : PIR 79: *
1: pir1: *
2: pir2: *
3: pir3: *
4: pir4: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	226	2 A53892	prion-related prot
2	193	100.0	232	2 S71041	major prion protei
3	193	100.0	241	2 S71048	major prion protei
4	193	100.0	241	2 S71056	major prion protei
5	193	100.0	245	2 S53627	major prion protei
6	193	100.0	245	2 S71045	major prion protei
7	193	100.0	252	2 S53634	major prion protei
8	193	100.0	252	2 S53631	major prion protei
9	193	100.0	253	1 UHHU	major prion protei
10	193	100.0	253	2 S53624	major prion protei
11	193	100.0	253	2 S53623	major prion protei
12	193	100.0	253	2 S53620	major prion protei
13	193	100.0	253	2 S53625	major prion protei
14	193	100.0	253	2 S71053	major prion protei
15	193	100.0	253	2 S71055	major prion protei
16	193	100.0	253	2 S53617	major prion protei
17	193	100.0	253	2 S53615	major prion protei
18	193	100.0	253	2 S53614	major prion protei
19	193	100.0	253	2 I37032	major prion protei
20	193	100.0	253	2 I61847	major prion protei
21	193	100.0	253	2 S53616	major prion protei
22	193	100.0	253	2 S53618	major prion protei
23	193	100.0	253	2 S53619	major prion protei
24	193	100.0	254	2 B34759	prion protein - go
25	193	100.0	254	2 A34759	prion protein - ch
26	193	100.0	254	2 A23544	major prion protei
27	192	99.5	252	2 I61848	major prion protei
28	192	99.5	260	2 S53629	major prion protei
29	191	99.0	264	2 S37137	prion protein - gr

30	189	97.9	239	2 S53633	major prion protei
31	188	97.4	254	1 UHHVH	major prion prP-Sc
32	188	97.4	256	2 JU0268	major prion protei
33	188	97.4	257	2 A23545	major prion prP27-
34	188	97.4	264	2 A54330	major prion protei
35	187	96.9	256	2 S37149	major prion protei
36	187	96.9	256	2 A54281	major prion protei
37	185	95.9	257	2 JU01900	major prion protei
38	182	94.3	252	2 JC6175	prion protein - ra
39	58	30.1	139	2 H90004	hypothetical prote
40	54	28.0	423	2 E97165	flagellar hook pro
41	54	28.0	511	2 C69199	phenylalanine-tRNA
42	53	27.5	267	1 UCH	major prion protei
43	53	27.5	267	2 A37372	prion protein homo
44	53	27.5	273	2 A46280	prion protein - ch
45	53	27.5	346	2 B71496	tryptophan-tRNA 11

ALIGNMENTS

RESULT 1
A53892
prion-related protein - rat (fragment)
C/Species: Rattus norvegicus (Norway rat)
C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Burton, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A/Title: Cloning of rat "prion-related protein" cDNA.
A/Reference number: A53892; MUID:88037055; PMID:2889848
A/Accession: A53892
A/Status: Preliminary
A/Molecule type: mRNA
A/Accession: 1-226 <LIA>
A/Cross-references: UNIPROT: P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C/Superfamily: major prion protein

Query Match 100.0%; Score 193; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 4e-16;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTTTGGNFETDVKMMER 36
DB 145 NNFVHDCVNITTKQHTVTTTGGNFETDVKMMER 180

RESULT 2

S71041
major prion protein - black-handed spider monkey (fragment)
C/Species: Ateles geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R/Schatzl, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT: P40246; EMBL: U08309; NID: G474376; PIDN: AAC50097.1; PID: G4743

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

U. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID: 95139066; PMID: 7837269

A/Accession: S53630

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-231 <SCH>

A/Cross-references: EMBL: U08309

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 4.1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 36
Db 157 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 192

RESULT 3

S71048

major prion protein - Calliobus moloch (fragment)
C/Species: Calliobus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71048; S53632
R/Schaeztl, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:9475585; PIDN:AAC50100.1; PID:94755

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53632

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 36
Db 166 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 201

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)

C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71056; S53621

R/Schaeztl, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA

A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:9474364; PIDN:AAC50091.1; PID:94743

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 36
Db 166 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 201

Db 166 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 201

RESULT 5

S53627

major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53627; S71043
R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

U. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53627
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291

R/Schaeztl, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71043

A/Molecule type: DNA

A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:9474340; PIDN:AAC50080.1; PID:9474341

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 36
Db 165 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 200

RESULT 6

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71045; S53628
R/Schaeztl, H.M.
submitted to the EMBL Data Library, April 1994

A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA

A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:9474342; PIDN:AAC50081.1; PID:947434

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA

A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 36
Db 165 NNFFVDCVNITIKOHTVTTTGGNFETDVKMER 200

RESULT 7

S53634


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major prion protein - common marmoset
C:Species: Callithrix jacchus (Common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53634; MUID:95139066; PMID:7837269
A:Accession: S53634
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71047
A:Accession: S71047
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:9474366; PIDN:ACG50092.1; PID:9474367
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4, 5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 36
DB      172 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 207

RESULT 8
major prion protein - brown capuchin
C:Species: Cebus apella (brown capuchin, black-capped capuchin)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53631; S71044
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53631; MUID:95139066; PMID:7837269
A:Accession: S53631
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40249; EMBL:U08295
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71044
A:Accession: S71044
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08295; NID:9474348; PIDN:ACG50084.1; PID:9474349
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4, 5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 36
DB      172 NNFWHDCVNITIKOHTVTTTNGENFETEDVKMMER 207

RESULT 9
major prion protein precursor - human
C:Species: Homo sapiens (man)
C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A24177; A40312; A05017; S14078; I54322; I68597; I58135; I59184; I79633; I79

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A;Kretzschmar,H.A.; Storrting,L.E.; Westaway,D.; Stubbslebine,W.H.; Prusiner,S.B.; Det
DNA 5, 315-324, 1986

A>Title: Molecular cloning of a human prion protein cDNA.

A.Reference number: A24173; MUID:86300093; PMID:3755672

A.Accession: A24173

A:Molecule type: mRNA

A.Residues: 1-253 <CRE>

A:Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAB60182.1; PID:g190468

R,Puckelt,C./ Concanon,P.; Casey,C.; Hood,L.
Am. J. Hum. Genet. 49, 320-329, 1991

A>Title: Genomic structure of the human prion protein gene.

A.Reference number: A40372; MUID:91328137; PMID:1678248

A.Accession: A40372

A>Status: not compared with conceptual translation

A:Molecule type: DNA

A.Residues: 1-80,89-253 <PUC>

A:Cross-references: GB:X83416; NID:g747846; PIDN:CAAS8442.1; PID:g747847

A>Note: The deletion may be a polymorphism, the alternative detection of 82-89 could not b

R,Illao,Y.C.U.J. Labo,R.V., Clawson,G.A.; Smucker,E.A.
Science 233, 364-367, 1986

A.Reference numbers: A05017; MUID:86261778; PMID:3014653

A.Accession: A05017

A:Molecule type: mRNA

A.Residues: 8-117,119-253 <LTA>

A:Cross-references: GB:D00015; NID:g220015; PIDN:BAA0011.1; PID:g220016; GB:M13667; NID:
R,TBilavim,F.; Prelli,F.; Ghiso,U.; Bugiani,O.; Seban,D.; Prusiner,S.B.; Farlow,
EMBO J. 10, 513-519, 1991

A>Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is

A.Reference number: S14078; MUID:91160504; PMID:1672107

A.Accession: S14078

A:Molecule type: protein

A.Residues: 58-72,X,'74-76,'XX','79,'XXX',83-86,111-128,'V',130-150 <TAG>

R,Dieitich,J.F.; Knopman,D.S.; List,J.F.; Olson,K.; Frey,W.H.
Hum. Mol. Genet. 1, 443-444, 1992

A>Title: Deletion in the prion protein gene in a demented patient.

A.Reference number: I54322; MUID:93250789; PMID:1263802

A.Accession: I54322

A>Status: Preliminary; translated from GB/EBML/DDBJ

A:Molecule type: DNA

A.Residues: 9-83,92-240 <RES>

A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518

A.Accession: I68597

A>Status: translated from GB/EBML/DDBJ

A:Molecule type: DNA

A.Residues: 8-240 <RE3>

A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520

R,Brown,P.; Goldfarb,L.G.; McCombie,W.R.; Nieto,A.; Squillacote,D.; Shermata,W.; I
Neurology 42, 422-427, 1992

A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insect mutation

A.Reference number: I58135; MUID:92140671; PMID:1736177

A.Accession: I58135

A>Status: preliminary; translated from GB/EBML/DDBJ

A:Molecule type: DNA

A.Residues: 51-91,'PHGGSGQHPHGGMGGOHPHGGMGQP'PHGGGQ'PHGGGQ'PHGGGQ'PHGGGQ'PHGGGQ'
A:Cross-references: GB:S80539; NID:g244698; PIDN:AAB21334.1; PID:g244699

R,Goldfard,L.G.; Brown,P.; McCombie,W.R.; Goldhaber,D.; Sweigold,G.D.; Wills,P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991

A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, an

A.Reference number: I59184; MUID:92073400; PMID:1683708

A.Accession: I59184

A>Status: translated from GB/EBML/DDBJ

A:Molecule type: DNA

A.Residues: 60-67 <COL>

A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID:

C.Genetics:

A:Gene: GDB:PRNP; CUD: PRIP

A:Cross-references: GDB:I20720; OMIM:176640; OMIM:137440

A:Map position: 20pter-20p12

A:introns: #status absent

A>Note: one intron occurs before the initiator codon

C.superfamily: major prion protein

C.Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F1-22/Domain: signal sequence #status predicted <SIG>
 F1-23/0/Product: major prion protein #status predicted <MAT>
 F1-24-92/Region: 8-residue repeats (P-H-G-G-G-W-G-Q)
 F1-231-25/Domain: carboxyl-terminal propetide #status predicted <CTP>
 F1-179-214/Diulfide bonds: #status predicted
 F1-181-197/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F1-230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
 Db 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 208

RESULT 10

S53624

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53624; S71051

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53624

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71051

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08311; NID:9475583; PIDN:AACS0099.1; PID:9475584

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
 Db 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 208

RESULT 11

S53623

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53623; S71052

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53623

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08298

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71052

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08298; NID:9474354; PIDN:AACS0087.1; PID:9474355

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
 Db 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 208

RESULT 12

S53620

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53620; S71058

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53620

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08294

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71058

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08294; NID:9474346; PIDN:AACS0083.1; PID:9474347

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
 Db 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 208

RESULT 13

S53625

major prion protein - Japanese macaque

C/Species: Macaca fuscata (Japanese macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53625; S71053

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53625

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08301

R/Schaeztl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71053

A/Molecule type: DNA

A/Residues: 1-210, 'F', 212-253 <SCW>

A/Cross-references: EMBL:U08301; NID:9474360; PIDN:AACS0090.1; PID:9474361

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||||||
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004

C:Accession: I84423; S53622; S71054

R:Schaefer, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A:Title: Infectious amyloid precursor gene sequences in primates used for experimental

A:Reference number: 136907; MUID:95083661; PMID:7991600

A:Accession: I84423

A:Status: preliminary; translated from GB/EMBL/DBD

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:9595850; PIDN:AA68635.1; PID:95958

R:Schaefer, L.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schaefer, L.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71041

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||||||
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schaefer, L.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71055

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:9474370; PIDN:AAC50094.1; PID:94743

R:Schaefer, L.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210, 'R', 212-247 <SCH>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||||||
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:38:39

Job time: 11.8 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 58.1902 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNTTKQHTVTTTGGENTFETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapect 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	232	1	P40246 atelae geof
2	193	100.0	238	1	Q95145 cercocobus
3	193	100.0	238	1	PRIO_CERAT
4	193	100.0	238	2	Q95270 theopithec
5	193	100.0	240	2	O86XRI
6	193	100.0	241	1	O8VHV4
7	193	100.0	241	1	PRIO_CALMO
8	193	100.0	241	1	PRIO_MANSF
9	193	100.0	245	1	PRIO_CERAE
10	193	100.0	246	1	PRIO_CERMO
11	193	100.0	246	1	PRIO_CERNE
12	193	100.0	246	1	PRIO_CERPO
13	193	100.0	246	2	PRIO_ERYPD
14	193	100.0	248	2	AA083636
15	193	100.0	252	1	O8VHV5
16	193	100.0	252	1	PRIO_CALJA
17	193	100.0	252	1	PRIO_CEBAP
18	193	100.0	253	1	PRIO_GORGO
19	193	100.0	253	1	PRIO_HUMAN
20	193	100.0	253	1	PRIO_HYLLA
21	193	100.0	253	1	PRIO_HYLSY
22	193	100.0	253	1	PRIO_MACFA
23	193	100.0	253	1	PRIO_PANTR
24	193	100.0	253	1	PRIO_PONRY
25	193	100.0	253	1	PRIO_PREFR
26	193	100.0	253	2	O6JL99
27	193	100.0	253	2	O6JL99
28	193	100.0	253	2	O9Z0T5
29	193	100.0	253	2	AA880162
30	193	100.0	253	2	AA812192
31	193	100.0	254	1	PRIO_CRIGR

32	193	100.0	254	1	PRIO_CRIMI	Q60468 cricetus
33	193	100.0	254	1	PRIO_MOUSE	P04925 mus musc
34	193	100.0	254	1	PRIO_RAT	P13852 ratus norv
35	193	100.0	254	1	PRIO_SIGHI	Q92003 sigmondon hi
36	193	100.0	254	2	O9Z0T4	Q92004 sigmondon fu
37	193	100.0	254	2	O8VHV6	Q8VHV6 apodemus by
38	193	100.0	254	2	AA019993	AA019993 ratus no
39	193	100.0	277	2	AA019993	AA019993 sapien
40	193	100.0	277	2	AA019993	AA019993 sapien
41	193	100.0	285	2	O75942	O75942 homo sapien
42	192	99.5	285	2	O866V7	O866V7 ochotona pr
43	192	99.5	285	2	O866V6	O866V6 diceros bic
44	192	99.5	260	1	PRIO_SAI5C	P40258 saimiri sci
45	191	99.0	215	2	O811W3	O811W3 spalax leuc

ALIGNMENTS

RESULT 1
ID PRIO_ATEGE STANDARD; PRT; 232 AA.
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Ateles Geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schaezel H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@sib-sib.ch).
CC
CC EMBL: U08309; AAC50097.1; -
CC PIR: S71041; S71041.
CC HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW NON_TER
FT SIGNAL
FT CHAIN
FT PROPEP
FT LIPID

```

FT DISULFID 163 198 similarity)
FT CARBOHYD 165 165 By similarity
FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential)
FT DOMAIN 44 84 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 51 0
FT REPEAT 52 59 1
FT REPEAT 60 67 2
FT REPEAT 68 75 3
FT NON TER 232 232 4
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 193; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 5.2e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 36
Db 157 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 192

RESULT 2
PRIO_CERAT
ID PRIO_CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops; and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyf A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04
CC InterPro: IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW

```

```

FT NON TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 GPI-anchor amidated serine (By
FT DISULFID 164 199 similarity).
FT CARBOHYD 166 166 By similarity.
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0
FT REPEAT 53 60 1
FT REPEAT 61 68 2
FT REPEAT 69 76 3
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3B8C3E3531B CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 36
Db 158 NNFVHDCVNTIKQHTVTTTGGNFETDVKMER 193

RESULT 3
PRIO_THEGE
ID PRIO_THEGE STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP; Synonym=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_TaxID=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyf A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04
CC InterPro: IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; PRION_1; 1.

```

[illegible]

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DT 01-MAR-2002 (TEMBL:rel. 20, Created)
DT 01-MAR-2002 (TEMBL:rel. 20, Last sequence update)
DT 01-JUN-2003 (TEMBL:rel. 24, Last annotation update)
DE P10N protein (fragment).
DE Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/Genbank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF676625; AA157232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; 6CAEMDDJF5F76693 CRC64;

Query March 100.0%; Score 193; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 5,4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFVHDCVNITIKOHTVTTTKGENFPEYDKMMER 36
Db 165 NNFVHDCVNITIKOHTVTTTKGENFPEYDKMMER 200

RESULT 6
ID PRIO_CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (P1F27-30) (PrP33-35C) (Fragment).
DE Name=PrNP;
GN Callicebus moloch (Dusky titi).
OS Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callicebinae;
OC Callicebus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases Kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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DR EMBL: U08312; AACG0100.1; -
DR PIR: S71048; S71048.
DR HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF003991; Prion.1.
DR PRINTS: PR00341; Prion.octapep; 6.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT DISULFID 172 207 By similarity.
FT LIPID 223 223 GPI-anchor amidated serine (By
similarity).
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 5,4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 201

RESULT 7
PRIO_MANSF STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Mandillus sphinx (Mandril) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Mandrillus.
OX NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "ronds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL: U08303; AACG0091.1; -
DR PIR: S71056; S71056.
DR HSSP: P23907; IG04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion.1.
DR Pfam: PF003991; Prion.octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 223 Major prion protein.
FT PROPEP 224 >241 Removed in mature form (By similarity).
FT LIPID 223 223 GPI-anchor amidated serine (By
similarity).
FT DISULFID 172 207 By similarity.
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-W-G-
Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
FT NON_TER 241 241
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;
Query Match 100.0%; Score 193; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 5,4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 201

RESULT 8
PRIO_CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OS Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Cercopithecus.
OX NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called


```
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U08291; AAC50080.1; -.
CC EMBL: U08292; AAC50081.1; -.
CC PIR: S53627; S53627.
CC PIR: S71045; S71045.
CC HSSP: P23907; 1G04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; Prion; 1.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC CHAIN 23 222
CC PROPEP 223 245
CC LIPID 222 222
CC -----
CC DISULFID 171 206
CC CARBOHYD 173 173
CC CARBOHYD 189 189
CC DOMAIN 51 83
CC FT REPEAT 51 59
CC FT REPEAT 60 67
CC FT REPEAT 68 75
CC FT REPEAT 76 83
CC FT REPEAT 77 84
CC SQ SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;
Query Match 100.0%; Score 193; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 200
RESULT 9
PRIO_CERMO STANDARD: PRT; 246 AA.
AC P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUN-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus mona (Mona monkey).
CC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC Cercopithecinae; Cercopithecus.
CC NCBI_TaxID=36226;
OX NCI
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion.";
```

```
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U75386; AAB50625.1; -.
CC HSSP: P23907; 1G04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; Prion; 1.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON TER 1 1
CC SIGNAL <1 15
CC CHAIN 16 223
CC PROPEP 224 246
CC LIPID 223 223
CC -----
CC DISULFID 172 207
CC CARBOHYD 174 174
CC CARBOHYD 190 190
CC DOMAIN 44 84
CC FT REPEAT 44 52
CC FT REPEAT 53 60
CC FT REPEAT 61 68
CC FT REPEAT 69 76
CC FT REPEAT 77 84
CC FT REPEAT 77 84
CC SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201
RESULT 10
PRIO_CERNE STANDARD: PRT; 246 AA.
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUN-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus neglectus (Debrazza's monkey).
CC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC Cercopithecinae; Cercopithecus.
CC NCBI_TaxID=36227;
OX NCI
RN [1]
RP SEQUENCE FROM N.A.
```

```

RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion."
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U75387; AAB50626.1; -
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion; octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR KX Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT FT SIGNAL 1 15
FT FT CHAIN 16 223
FT FT PROPEP 224 246
FT FT LIPID 223 223
FT FT DISULFID 172 207
FT FT CARBOHYD 174 174
FT FT CARBOHYD 190 190
FT FT DOMAIN 44 84
FT FT REPEAT 44 52
FT FT REPEAT 53 60
FT FT REPEAT 61 68
FT FT REPEAT 69 76
FT FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5,5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNIITIKQHTVTTTGGKGFETEDVQWMER 36
Db 166 NNFVHDCVNIITIKQHTVTTTGGKGFETEDVQWMER 201
RESULT 11
PRIO CERTO STANDARD; PRT; 246 AA.
AC 095176;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-01-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Butleria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.

```

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OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion."
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U75385; AAB50628.1; -
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion; octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR KX Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT FT SIGNAL 1 15
FT FT CHAIN 16 223
FT FT PROPEP 224 246
FT FT LIPID 223 223
FT FT DISULFID 172 207
FT FT CARBOHYD 174 174
FT FT CARBOHYD 190 190
FT FT DOMAIN 44 84
FT FT REPEAT 44 52
FT FT REPEAT 53 60
FT FT REPEAT 61 68
FT FT REPEAT 69 76
FT FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26914 MW; F58679CBBEC5ADCT CRC64;
Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5,5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNIITIKQHTVTTTGGKGFETEDVQWMER 36
Db 166 NNFVHDCVNIITIKQHTVTTTGGKGFETEDVQWMER 201
RESULT 12
PRIO ERYPA STANDARD; PRT; 246 AA.
AC 095174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-01-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

```

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Erythrocebus.
 NC NCBITaxid=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Gouda J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; U75388; AAB50627.1; -;
 DR HSSP; P23907; 1G04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON_TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
 Query Match 100.0%; Score 193; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. NO. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
 Db 166 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 201
 RESULT 13
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TREMblrel. 27, Created)
 DT 02-MAR-2004 (TREMblrel. 27, Last sequence update)
 DT 02-MAR-2004 (TREMblrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NC NCBITaxid=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY219883; AAO83636.1; -;
 KM Prion.
 FT NON_TER 1
 FT NON_TER 246
 SQ SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
 Query Match 100.0%; Score 193; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. NO. 5.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
 Db 166 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 201
 RESULT 14
 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (TREMblrel. 20, Created)
 DT 01-MAR-2002 (TREMblrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMblrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Clethrionomys glareolus (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Clethrionomys.
 NC NCBITaxid=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AF367624; AAL57231.1; -;
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Prion.
 FT NON_TER 248
 FT NON_TER 248
 SQ SEQUENCE 248 AA; 27259 MW; 815B64BCD2773C2C CRC64;
 Query Match 100.0%; Score 193; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. NO. 5.6e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36
 Db 173 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 208
 RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUL-2004 (Rel. 44, last annotation update)
DE Major prion protein precursor (PrP) (Pp27-30) (Pp33-35C).
GN Name=PrNP;
OS Callithrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callithrix.
OX NCBI_TaxID=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269.
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL, U08304; AAC50092.1; -.
DR PIR, S53634; S53634.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229 By similarity.
FT PROPEP 230 252 Major prion protein.
FT LIPID 229 229 Removed in mature form (By similarity).
FT GPI-anchor amidated serine (By similarity).
FT DISULFID 178 213 By similarity.
FT CARBOHYD 180 180 N-linked (GlcNAc...) (potential).
FT CARBOHYD 196 196 N-linked (GlcNAc...) (potential).
FT DOMAIN 51 90 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 51 58 1.
FT REPEAT 59 66 2.
FT REPEAT 67 74 3.
FT REPEAT 75 82 4.
FT REPEAT 83 90 5.
SQ SEQUENCE 252 AA; 27639 MW; B2800B60FD5CE664 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 5.7e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNTTKQHTVTTTNGENFTSDYKMMER 36
DB 172 NNFVHDCVNTTKQHTVTTTNGENFTSDYKMMER 207

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Search completed: December 3, 2004, 00:35:29
 Job time : 59.1902 secs

GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTITTKGENFTETDVKKMER 36

Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA: *
1: /cgn2_6/ptodata/1/1aa/5A.COMB.pep.*
2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep.*
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep.*
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep.*
5: /cgn2_6/ptodata/1/1aa/PTCUS.COMB.pep.*
6: /cgn2_6/ptodata/1/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	142	1	US-08-556-823-10 Sequence 10, Appl
2	193	100.0	245	4	US-09-431-887-5 Sequence 5, Appl
3	193	100.0	245	4	US-09-431-887-15 Sequence 15, Appl
4	193	100.0	252	4	US-09-431-887-13 Sequence 13, Appl
5	193	100.0	252	4	US-09-431-887-17 Sequence 17, Appl
6	193	100.0	253	1	US-08-242-188-2 Sequence 2, Appl
7	193	100.0	253	1	US-08-509-261A-2 Sequence 2, Appl
8	193	100.0	253	1	US-08-660-626-8 Sequence 8, Appl
9	193	100.0	253	1	US-08-692-892-2 Sequence 2, Appl
10	193	100.0	253	2	US-08-713-939A-2 Sequence 2, Appl
11	193	100.0	253	2	US-08-868-162A-22 Sequence 2, Appl
12	193	100.0	253	3	US-09-031-168-8 Sequence 8, Appl
13	193	100.0	253	3	US-09-128-450-20 Sequence 20, Appl
14	193	100.0	253	3	US-09-036-579-2 Sequence 2, Appl
15	193	100.0	253	3	US-09-823-494-20 Sequence 20, Appl
16	193	100.0	253	3	US-09-550-374-2 Sequence 2, Appl
17	193	100.0	253	4	US-09-431-887-1 Sequence 1, Appl
18	193	100.0	253	4	US-09-431-887-2 Sequence 2, Appl
19	193	100.0	253	4	US-09-431-887-3 Sequence 3, Appl
20	193	100.0	253	4	US-09-431-887-4 Sequence 4, Appl
21	193	100.0	253	4	US-09-431-887-7 Sequence 7, Appl
22	193	100.0	253	4	US-09-431-887-8 Sequence 8, Appl
23	193	100.0	253	4	US-09-431-887-9 Sequence 9, Appl
24	193	100.0	253	4	US-09-431-887-10 Sequence 10, Appl
25	193	100.0	253	4	US-09-431-887-11 Sequence 11, Appl
26	193	100.0	253	4	US-09-431-887-12 Sequence 12, Appl
27	193	100.0	253	4	US-09-431-887-14 Sequence 14, Appl

28	193	100.0	253	4	US-09-431-887-16 Sequence 16, Appl
29	193	100.0	253	4	US-09-431-887-18 Sequence 18, Appl
30	193	100.0	253	4	US-09-431-887-19 Sequence 19, Appl
31	193	100.0	253	4	US-09-943-906-2 Sequence 2, Appl
32	193	100.0	253	4	US-09-669-516C-8 Sequence 8, Appl
33	193	100.0	253	4	US-09-919-172-57 Sequence 57, Appl
34	193	100.0	253	4	US-09-976-594-72 Sequence 72, Appl
35	193	100.0	253	4	US-09-904-987-3 Sequence 3, Appl
36	193	100.0	254	1	US-08-242-188-1 Sequence 1, Appl
37	193	100.0	254	1	US-08-509-261A-1 Sequence 1, Appl
38	193	100.0	254	1	US-08-660-626-7 Sequence 7, Appl
39	193	100.0	254	1	US-08-692-892-1 Sequence 1, Appl
40	193	100.0	254	2	US-08-713-939A-1 Sequence 21, Appl
41	193	100.0	254	2	US-08-868-162A-21 Sequence 7, Appl
42	193	100.0	254	3	US-09-031-168-7 Sequence 19, Appl
43	193	100.0	254	3	US-09-128-450-19 Sequence 28, Appl
44	193	100.0	254	3	US-09-128-450-28 Sequence 1, Appl
45	193	100.0	254	3	US-09-036-579-1 Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10

Sequence 10, Application US/08556823
Patent No. 5750361

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner

APPLICANT: Kiyotoshi Kaneko
APPLICANT: Fred E. Cohen

TITLE OF INVENTION: Formation and use of prion protein
TITLE OF INVENTION: Formation and use of prion protein

NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:

ADDRESS: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park
STATE: California

COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823

FILING DATE:
CLASSIFICATION: 530

ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg

REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001

TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070

TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids

TYPE: amino acid
TOPOLOGY: linear

MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 7.4e-20;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTITTKGENFTETDVKKMER 36
|||
Db 84 NNFVHDCVNITIKQHTVTITTKGENFTETDVKKMER 119

RESULT 2
US-09-431-887-5
Sequence 5, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 5
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
Db 165 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 200

RESULT 3
US-09-431-887-15
Sequence 15, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 15
LENGTH: 245
TYPE: PRT
ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
Db 165 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 200

RESULT 4
US-09-431-887-13
Sequence 13, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4

PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13
LENGTH: 252
TYPE: PRT
ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
Db 172 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 207

RESULT 5
US-09-431-887-17
Sequence 17, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
PRIOR FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 17
LENGTH: 252
TYPE: PRT
ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 36
Db 172 NNFVHDCVNIITKQHTVTTTGGNFETEDVMMER 207

RESULT 6
US-08-242-188-2
Sequence 2, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicvic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bosicvic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bosicvic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPILOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

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APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-692-892-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5845533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flinn & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

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```

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETEDVKMMR 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

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TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 208

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: AsciII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031.168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:

ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149

GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabrey, Joelle
APPLICANT: Priola, Suetete
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCES: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTFTEDVKMMR 208

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036.579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match
Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFYHDCVNITIKOHTVTTTGGNFTETDVKKMER 36
Db 173 NNFYHDCVNITIKOHTVTTTGGNFTETDVKKMER 208

RESULT 15

US-09-823-494-20
Sequence 20; Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chasebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRP
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match
Best Local Similarity 100.0%; Score 193; DB 3; Length 253;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFYHDCVNITIKOHTVTTTGGNFTETDVKKMER 36
Db 173 NNFYHDCVNITIKOHTVTTTGGNFTETDVKKMER 208

Search completed: December 3, 2004, 00:18:56
Job time: 14.6328 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_214
Perfect score: 193
Sequence: 1 NMFVHDCVNTTKQHTVTTTSGENFTEDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database:

Published Applications AA:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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1	193	100.0	117	14	US-10-050-902-348
2	193	100.0	117	14	US-10-050-902-348
3	193	100.0	117	14	US-10-346-190-89
4	193	100.0	124	14	US-10-050-902-324
5	193	100.0	124	14	US-10-050-898-324
6	193	100.0	124	14	US-10-346-190-93
7	193	100.0	141	16	US-10-612-356A-1
8	193	100.0	162	9	US-09-745-003-10
9	193	100.0	163	14	US-10-104-047-2013
10	193	100.0	164	9	US-09-745-003-12
11	193	100.0	200	16	US-10-470-848-10
12	193	100.0	208	16	US-10-470-848-3
13	193	100.0	208	17	US-10-745-393-1

14	193	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	193	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	193	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl1
17	193	100.0	225	15	US-10-301-448-25	Sequence 25, Appl1
18	193	100.0	226	14	US-10-205-194-121	Sequence 121, Appl
19	193	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	193	100.0	245	14	US-10-304-630-15	Sequence 15, Appl1
21	193	100.0	252	14	US-10-304-630-13	Sequence 13, Appl1
22	193	100.0	252	14	US-10-304-630-17	Sequence 17, Appl1
23	193	100.0	253	9	US-09-823-494-20	Sequence 20, Appl1
24	193	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	193	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
26	193	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	193	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	193	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	193	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	193	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	193	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	193	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	193	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	193	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
35	193	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
36	193	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
37	193	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
38	193	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
39	193	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
40	193	100.0	253	14	US-10-304-630-19	Sequence 19, Appl1
41	193	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
42	193	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
43	193	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
44	193	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	193	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 87

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tiesoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ortmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Steufendiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 87

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
PRIOR FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 87

RESULT 4

US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tiesoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrPc construct
US-10-050-902-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 36
Db 53 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMER 88

RESULT 5

US-10-050-898-324
Sequence 324, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin

APPLICANT: Tisec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosnek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0130005
CURRENT APPLICATION NUMBER: US/10/050.898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mRPr

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
DB 53 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346.190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mRPr
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
DB 53 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Luhn, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612.356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
DB 84 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PrP2
CURRENT APPLICATION NUMBER: US/09/745.003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: Primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 36
DB 82 NNPFVHDCVNITIKQHTVTTTGGKGFETDVKKMER 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: NO. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match
Best Local Similarity 100.0%; Score 193; DB 14; Length 163;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 118

RESULT 10
US-09-745-003-12
;; Sequence 12, Application US/09745003
;; Patent No. US20020042122A1
;; GENERAL INFORMATION:
;; APPLICANT: Bazan, Fernando J
;; TITLE OF INVENTION: Human Proteins; Related Reagents
;; FILE REFERENCE: Prp2
;; CURRENT APPLICATION NUMBER: US/09/745,003
;; CURRENT FILING DATE: 2000-12-20
;; NUMBER OF SEQ ID NOS: 13
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 12
;; LENGTH: 164
;; TYPE: PRT
;; ORGANISM: rodent
US-09-745-003-12

Query Match
Best Local Similarity 100.0%; Score 193; DB 9; Length 164;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 117

RESULT 11
US-10-470-848-10
;; Sequence 10, Application US/10470848
;; Publication No. US20040137421A1
;; GENERAL INFORMATION:
;; APPLICANT: President of Tohoku University
;; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
;; FILE REFERENCE: PH-1224-PCF
;; CURRENT APPLICATION NUMBER: US/10/470,848
;; CURRENT FILING DATE: 2003-07-31
;; PRIOR APPLICATION NUMBER: JP 2001-24279
;; PRIOR FILING DATE: 2001-01-31
;; NUMBER OF SEQ ID NOS: 10
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 10
;; LENGTH: 200
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match
Best Local Similarity 100.0%; Score 193; DB 16; Length 200;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36

DB 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 178

RESULT 12
US-10-470-848-3
;; Sequence 3, Application US/10470848
;; Publication No. US20040137421A1
;; GENERAL INFORMATION:
;; APPLICANT: President of Tohoku University
;; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
;; FILE REFERENCE: PH-1224-PCF
;; CURRENT APPLICATION NUMBER: US/10/470,848
;; CURRENT FILING DATE: 2003-07-31
;; PRIOR APPLICATION NUMBER: JP 2001-24279
;; PRIOR FILING DATE: 2001-01-31
;; NUMBER OF SEQ ID NOS: 10
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 3
;; LENGTH: 208
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match
Best Local Similarity 100.0%; Score 193; DB 16; Length 208;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 186

RESULT 13
US-10-745-393-1
;; Sequence 1, Application US/10745393
;; Publication No. US20040203131A1
;; GENERAL INFORMATION:
;; APPLICANT: Schatz, Elke
;; APPLICANT: Scholz, Christian
;; APPLICANT: Schatz, Werner
;; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl isomerase
;; FILE REFERENCE: 12290 US3 (9793/141)
;; CURRENT APPLICATION NUMBER: US/10/745,393
;; CURRENT FILING DATE: 2003-12-23
;; PRIOR APPLICATION NUMBER: EP 01115225.3
;; PRIOR FILING DATE: 2001-06-22
;; PRIOR APPLICATION NUMBER: EP 01120939.2
;; PRIOR FILING DATE: 2001-08-31
;; PRIOR APPLICATION NUMBER: US 10/167,774
;; PRIOR FILING DATE: 2002-06-10
;; PRIOR APPLICATION NUMBER: US 10/179,905
;; PRIOR FILING DATE: 2002-06-24
;; NUMBER OF SEQ ID NOS: 3
;; SOFTWARE: PatentIn version 3.1
;; SEQ ID NO 1
;; LENGTH: 208
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match
Best Local Similarity 100.0%; Score 193; DB 17; Length 208;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMER 186

RESULT 14

US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:ChM-type prion protein
US-10-470-848-6

Query Match 100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
|||
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:ChV type prion protein
US-10-470-848-7

Query Match 100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
|||
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186

Search completed: December 3, 2004, 01:07:45
Job time : 42.6098 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 66.2295 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGENFTEDVQKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

- 1: geneseqp1980s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	211	100.0	117	5	ABG94357 Modified
2	211	100.0	117	5	ABG80669 Human pri
3	211	100.0	117	7	ADD24196 Modified
4	211	100.0	124	5	ABG94340 Mouse mpr
5	211	100.0	124	5	ABG80652 Mouse tru
6	211	100.0	124	7	ADD24200
7	211	100.0	142	2	AAW17686
8	211	100.0	163	7	ADB63859 Human mpr
9	211	100.0	200	5	ABG31907 Human pri
10	211	100.0	208	3	ABAB07316 Mouse pri
11	211	100.0	208	3	ABAB07318 Human pri
12	211	100.0	208	3	ABAB07327 Mouse pri
13	211	100.0	208	3	ABAB07329 Human pri
14	211	100.0	208	5	ABG31902 Human pri
15	211	100.0	208	5	ABG31904 Chimera-t
16	211	100.0	208	7	ADJ66133 Mouse pri
17	211	100.0	209	5	ABG31905 HCHV type
18	211	100.0	211	4	ABAB0801 Amino aci
19	211	100.0	225	6	ABR42793 Rat prion
20	211	100.0	226	7	ADB85240 Mouse pri
21	211	100.0	245	4	ABAB72342 Monkey pr
22	211	100.0	245	4	ABAB72352 Cercopit
23	211	100.0	253	2	AAW86715 Human pri
24	211	100.0	253	2	AAW86960 Human pri
25	211	100.0	253	2	AAW85901 Human pri

26	211	100.0	253	2	AAW07994 Human pri
27	211	100.0	253	3	AAW81485 Human pri
28	211	100.0	253	3	ABAB06272 Human prp
29	211	100.0	253	3	ABAB15035 Human pri
30	211	100.0	253	4	ABAB72339 Chimpanze
31	211	100.0	253	4	ABAB72347 Prion pro
32	211	100.0	253	4	ABAB72353 Guereza p
33	211	100.0	253	4	ABAB72344 Rhesus mo
34	211	100.0	253	4	ABAB72345 Gibbon pr
35	211	100.0	253	4	ABAB72350 Marmoset
36	211	100.0	253	4	ABAB72351 Hamadryas
37	211	100.0	253	4	ABAB72348 Prion pro
38	211	100.0	253	4	ABAB72356 Siamese p
39	211	100.0	253	4	ABAB72346 Prion pro
40	211	100.0	253	4	ABAB72355 Prion pro
41	211	100.0	253	4	ABAB72349 Prion pro
42	211	100.0	253	4	ABAB72340 Orangutan
43	211	100.0	253	4	ABAB72338 Human pri
44	211	100.0	253	4	ABAB72354 Capuchin
45	211	100.0	253	4	ABAB72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein, 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002MO-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisbet A, Maurer P, Lechner F, Seibel P;
PI Ploesek C;
XX
XX WPI; 2002-627351/67.
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
XX Disclosure; Page 441; 441pp; English.
PS This invention relates to a novel ordered and repetitive antigen array
PS used in the production of vaccines for infectious diseases. The invention
PS also discloses a composition comprising a non-natural molecular scaffold
PS comprising a core particle selected from a core particle of a non-natural
PS origin and a core particle of natural origin and an organiser comprising
PS at least one first attachment site, where the organiser is connected to
PS the core particle by at least one covalent bond. Also disclosed is an
PS antigen or antigenic determinant with at least one second attachment
PS site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant beta coat proteins
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 CC
 CC Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 40
 DB 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 91

RESULT 2

ABG80669 ID ABG80669 standard; protein; 117 AA.
 XX ABG80669;

DT 29-NOV-2002 (first entry)
 XX

DE Human prion protein/cysteine-containing peptide fusion protein.
 XX

KW Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW grata versus host disease; amyloid beta; Abeta 1-42; influenza; mutant;
 KW adult respiratory distress syndrome; AIDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW rheumatoid arthritis; diabetes; infectious disease; lymphadenopathy;
 KW enterokinase; cysteine-containing linker.
 XX

OS Homo sapiens.
 OS Synthetic.
 XX

PN W0200256907-A2.
 XX

PD 25-JUL-2002.
 XX

PF 21-JAN-2002; 2002MO-IB000168.
 XX

PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVA) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER P.
 PA (ORTW) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STAU) STAUENBIEL M.
 PA (FREY) FREY P.
 XX

PI Maurer P, Lechner F, Ortmann R, Luboend R, Stauenbiel M, Frey P;

PI Renner WA, Bachmann M, Tisot A, Seibel P, Ploseck C;
 XX WPI; 2002-636514/68.
 DR

PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX

PS Disclosure; Page 418; 418pp; English.
 XX

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the first attachment site; and (c) a second attachment site
 CC occurring with the antigen or antigenic determinant; and where the second
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy, immunoblastic
 CC angioimmunoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX

SQ Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 40
 DB 52 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMERVVEQ 91

RESULT 3

ADD24196 ID ADD24196 standard; protein; 117 AA.
 XX

AC ADD24196;
 XX

DT 15-JAN-2004 (first entry)
 XX

DE Modified human prion protein amino acid sequence.
 XX

KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; muten.
 KW
 XX

OS Synthetic.
 OS prion.
 XX

PN W02003059386-A2.
 XX

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 PF
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Belliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 PS Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 211; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTKGKGFETDVKKMERVVEQ 40
 Db 52 NNFVHDCVNITIKQHTVTTTKGKGFETDVKKMERVVEQ 91
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cycostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 PD 25-JUL-2002;
 XX
 PF 21-JAN-2002; 2002WO-IB000166.
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
 PI Plossek C;
 XX WPI; 2002-627351/57.
 DR
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS Disclosure; Page 438; 441pp; English.
 XX
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the association to form an ordered and
 CC scaffold interfere through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β subunit sequences
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cycostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTKGKGFETDVKKMERVVEQ 40
 Db 53 NNFVHDCVNITIKQHTVTTTKGKGFETDVKKMERVVEQ 92
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β 1-42; influenza; mutein;
 KM graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS

PN WO200256907-A2.
 XX 25-JUL-2002.
 PD 21-JAN-2002; 2002WO-IB000168.
 XX 19-JAN-2001; 2001US-0262379P.
 PF 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 XX 07-NOV-2001; 2001US-0331045P.
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUEO) LUEBEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX MAURER P, Lechner F, Ottmann R, Lueoend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Plosser C;
 DR WPI; 2002-636514/68.
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX Example 7; Page 415; 418pp; English.
 XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an antigen or antigenic determinant with at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the scaffold by at least
 CC one attachment site selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the scaffold interact
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia (ALL), non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (entropinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).
 XX Sequence 124 AA;
 SO
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 53 NNFFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrP-EK-Fc* cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.
 XX
 OS Unidentified.
 OS prion.
 XX
 PN WO2003059386-A2.
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pellicoli E, Renner WA;
 DR WPI; 2003-598483/56.
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Example 13; SEQ ID NO 93; 246pp; English.
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX Sequence 124 AA;
 SO
 Query Match 100.0%; Score 211; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
 Db 53 NNFFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 92
 RESULT 7
 AA017686
 ID AA017686 standard; peptide; 142 AA.
 XX
 AC AA017686;
 XX

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DT 14-JAN-1998 (first entry)
XX
XX Prion protein peptide Hu 90-231.
XX
XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
XX
XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
XX
XX Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
XX
XX Gerstmann-Strausler-Scheinker disease; hamster; human.
XX
XX Homo sapiens.
XX
XX MO9716728-A1.
XX
XX 09-MAY-1997.
XX
XX 28-OCT-1996; 96WO-US017462.
XX
XX 02-NOV-1995; 95US-00556823.
XX
XX (REGC ) UNIV CALIFORNIA.
XX
XX Prusiner SB, Kaneko K, Cohen FE;
XX
XX WPI; 1997-272248/24.
XX
XX Prion proteins (PrPs) having at least one alpha-helical domain - used in
XX
XX assays for screening compounds able to inhibit or decrease the binding of
XX
XX PrP peptide(s) to cellular prion proteins or peptide(s).
XX
XX Claim 11; Page 7-38; 50pp; English.
XX
XX The present sequence represents a prion protein (PrP) peptide. PrP has an
XX
XX ability to induce a conformational change in cellular prion protein (PrP-
XX
XX c). Methods, for screening compounds which inhibit the binding of PrP-c
XX
XX to a PrP peptide, are used for screening for drugs that may be useful in
XX
XX the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
XX
XX encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
XX
XX Strausler-Scheinker disease) and FFI (fatal familial insomnia)
XX
XX Sequence 142 AA:
SQ
Query Match 100.0%; Score 211; DB 2; Length 142;
Best Local Similarity 100.0%; Pred. No. 1.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
DB 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 123

```

```

PR 05-NOV-2001; 2001JP-00379298.
PR 25-JAN-2002; 2002US-00350978.
XX
XX (HELI-) HELIX RES INST.
XX
XX (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
XX Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
XX
XX Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
XX
XX Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
XX
XX WPI; 2003-450961/43.
XX
XX N-PSDB; ADB61889.
XX
XX New polynucleotides and polypeptides, useful for developing a diagnostic
XX
XX marker or medicines for regulation of their expression and activity, or
XX
XX as targets of gene therapy.
XX
XX Claim 1; Page; 222pp; English.
XX
XX The invention discloses a polynucleotide comprising a sequence selected
XX
XX from 1970 fully defined nucleotide sequences which encode novel
XX
XX polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
XX
XX or its partial peptide, an antibody binding to the polypeptide or peptide
XX
XX of the polynucleotide, immunologically assaying the polypeptide or
XX
XX peptide of the polynucleotide by contacting the polypeptide or peptide
XX
XX with the antibody of the encoded protein, and observing the binding
XX
XX between the two, a transformant carrying the polynucleotide in an
XX
XX expressible manner and an antisense polynucleotide. The oligonucleotide
XX
XX is useful as a primer for synthesizing the polynucleotide, or as a probe
XX
XX for detecting the polynucleotide. The polynucleotides and encoded
XX
XX proteins are useful as pharmaceutical agents and many disease-related
XX
XX genes may be included in them, for developing a diagnostic marker or
XX
XX medicines for regulation of their expression and activity, or as targets
XX
XX of gene therapy. The genes are involved in tissue and/or cell
XX
XX regeneration. Membrane proteins, signal transduction-related proteins,
XX
XX transcription-related proteins, disease-related proteins and genes
XX
XX encoding them can be used as indicators for diseases (e.g. osteoporosis,
XX
XX neurological diseases, cancer, tumours. The cDNA may be used to regulate
XX
XX the activity or expression of the encoded protein to treat diseases. The
XX
XX sequence presented is a protein of the invention. Note: Some of the
XX
XX sequence data for this patent is not represented in the printed
XX
XX specification, but is based on sequence information supplied by the
XX
XX European Patent Office.
SQ
Sequence 163 AA;
Query Match 100.0%; Score 211; DB 7; Length 163;
Best Local Similarity 100.0%; Pred. No. 2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
DB 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 122

```

Query Match	100.0%	Score 211	DB 5	Length 200
Best Local Similarity	100.0%	Free. No. 2.5e-20		
Matches	40	Conservative	0	Mismatches 0; Indels 0; Gaps 0;
QY	1	NNFVHDCVNIITKKOHTVTTTNGENFTFDVKKMRVEEQ	40	
Db	143	NNFVHDCVNIITKKOHTVTTTNGENFTFDVKKMRVEEQ	182	

Result ID	Accession	Protein Name	Gene Name	Location/Qualifiers
10	AA07316	standard; protein; 208 AA.		Location/Qualifiers 37..68 /note= "Repeat region consisting of tandem repeats of repeat unit: PHGGGQQ (AA07319)"
11	AA07316	standard; protein; 208 AA.		Repeat unit: PHGGGQQ (AA07319)
12	AA07316	standard; protein; 208 AA.		208
13	AA07316	standard; protein; 208 AA.		/note= "C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"
14	AA07316	standard; protein; 208 AA.		
15	AA07316	standard; protein; 208 AA.		
16	AA07316	standard; protein; 208 AA.		
17	AA07316	standard; protein; 208 AA.		
18	AA07316	standard; protein; 208 AA.		
19	AA07316	standard; protein; 208 AA.		
20	AA07316	standard; protein; 208 AA.		
21	AA07316	standard; protein; 208 AA.		
22	AA07316	standard; protein; 208 AA.		
23	AA07316	standard; protein; 208 AA.		
24	AA07316	standard; protein; 208 AA.		
25	AA07316	standard; protein; 208 AA.		
26	AA07316	standard; protein; 208 AA.		
27	AA07316	standard; protein; 208 AA.		
28	AA07316	standard; protein; 208 AA.		
29	AA07316	standard; protein; 208 AA.		
30	AA07316	standard; protein; 208 AA.		
31	AA07316	standard; protein; 208 AA.		
32	AA07316	standard; protein; 208 AA.		
33	AA07316	standard; protein; 208 AA.		
34	AA07316	standard; protein; 208 AA.		
35	AA07316	standard; protein; 208 AA.		
36	AA07316	standard; protein; 208 AA.		
37	AA07316	standard; protein; 208 AA.		
38	AA07316	standard; protein; 208 AA.		
39	AA07316	standard; protein; 208 AA.		
40	AA07316	standard; protein; 208 AA.		
41	AA07316	standard; protein; 208 AA.		
42	AA07316	standard; protein; 208 AA.		
43	AA07316	standard; protein; 208 AA.		
44	AA07316	standard; protein; 208 AA.		
45	AA07316	standard; protein; 208 AA.		
46	AA07316	standard; protein; 208 AA.		
47	AA07316	standard; protein; 208 AA.		
48	AA07316	standard; protein; 208 AA.		
49	AA07316	standard; protein; 208 AA.		
50	AA07316	standard; protein; 208 AA.		
51	AA07316	standard; protein; 208 AA.		
52	AA07316	standard; protein; 208 AA.		
53	AA07316	standard; protein; 208 AA.		
54	AA07316	standard; protein; 208 AA.		
55	AA07316	standard; protein; 208 AA.		
56	AA07316	standard; protein; 208 AA.		
57	AA07316	standard; protein; 208 AA.		
58	AA07316	standard; protein; 208 AA.		
59	AA07316	standard; protein; 208 AA.		
60	AA07316	standard; protein; 208 AA.		
61	AA07316	standard; protein; 208 AA.		
62	AA07316	standard; protein; 208 AA.		
63	AA07316	standard; protein; 208 AA.		
64	AA07316	standard; protein; 208 AA.		
65	AA07316	standard; protein; 208 AA.		
66	AA07316	standard; protein; 208 AA.		
67	AA07316	standard; protein; 208 AA.		
68	AA07316	standard; protein; 208 AA.		
69	AA07316	standard; protein; 208 AA.		
70	AA07316	standard; protein; 208 AA.		
71	AA07316	standard; protein; 208 AA.		
72	AA07316	standard; protein; 208 AA.		
73	AA07316	standard; protein; 208 AA.		
74	AA07316	standard; protein; 208 AA.		
75	AA07316	standard; protein; 208 AA.		
76	AA07316	standard; protein; 208 AA.		
77	AA07316	standard; protein; 208 AA.		
78	AA07316	standard; protein; 208 AA.		
79	AA07316	standard; protein; 208 AA.		
80	AA07316	standard; protein; 208 AA.		
81	AA07316	standard; protein; 208 AA.		
82	AA07316	standard; protein; 208 AA.		
83	AA07316	standard; protein; 208 AA.		
84	AA07316	standard; protein; 208 AA.		
85	AA07316	standard; protein; 208 AA.		

Dd		1	NNFVHDCVNITIKQHTVTTTKGNFETIDVKMERVVEQ	40
		190	NNFVHDCVNITIKQHTVTTTKGNFETIDVKMERVVEQ	189
RESULT 11				
AAB07318	ID	AAB07318	standard; protein; 208 AA.	
XX	AC	AAB07318;		
XX	DT	17-OCT-2000	(first entry)	
XX	DE	Human prion protein sequence.		
XX	KM	Human; prion protein; transmissible spongiform encephalopathy;		
XX	KW	bovine spongiform encephalopathy; BSE diagnosis; TSE, PrP.		
OS	Homo sapiens.			
XX				
FH	Key	Location/Qualifiers		
FT	Region	29..69		
FT	/note= "Repeat region consisting of tandem repeats of			
FT	Disulfide-bond	repeat unit: PHGGGWGQ (AAB07319)"		
FT	Modified-site	157..192		
FT	/note= "C-terminal phospho-inositol glycolipid membrane			
XT	anchor (- GPI) "			
FN	MO200029850-AI.			
XX				
PD	25-MAY-2000.			
XX				
Pf	27-OCT-1999;	99WO-FI000897.		
XX				
PR	17-NOV-1998;	98FI-00002481.		
XX				
PA	(Wall-) WALLAC OY,			
PA	(BBSR-) BBSRC OFFICE.			
PI				
PT	Hope J, Barnard GRJ, Blkett CR;			
XX				
DR	WPI; 2000-387880/33.			
XX				
PT	Novel immunoassay for prion protein, used for the determination of			

PT transmissible spongiform encephalopathies in bovines.
 XX Disclousure; Page 43-44; 50pp; English.
 PS
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGENTFETDVKKMERVREQ 40
 DB 151 NNFVHDCVNITIKQHTVTTTGGENTFETDVKKMERVREQ 190
 RESULT 12
 AAB07327
 ID AAB07327 standard; protein; 208 AA.
 AC AAB07327;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Mouse prion protein sequence.
 XX
 KM Mouse; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Mus sp.
 XX
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN W0200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99MO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 XX New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclousure; Page 41-42; 50pp; English.
 CC The present sequence is the mouse prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGENTFETDVKKMERVREQ 40
 DB 150 NNFVHDCVNITIKQHTVTTTGGENTFETDVKKMERVREQ 189
 RESULT 13
 AAB07329
 ID AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KM Human; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Homo sapiens.
 XX
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note="Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note="C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN W0200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99MO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 XX New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclousure; Page 43-44; 50pp; English.
 CC The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 190

RESULT 14

ABG31902 ID ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

DE Human prion protein related protein #2.

KM Prion; human; follicular dendritic cells; FDC; infection;

KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNITV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX
 PS Disclosure; Page 49-50; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 190

RESULT 15
 ABG31904 ID ABG31904 standard; protein; 208 AA.

AC ABG31904;

DT 05-NOV-2002 (first entry)

DE Chimera-type prion protein #2.

KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
 KW food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

PN MO200261418-A1.

PD 08-AUG-2002.

PF 31-JAN-2002; 2002MO-JP000803.

PR 31-JAN-2001; 2001JP-00024279.

PA (TOHO) UNITV TOHOKU.

PI Kitamoto T, Miyoshi K, Mohri S;

DR WPI; 2002-619277/66.

PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX
 PS Claim 9; Page 55-57; 69pp; Japanese.

CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 190

Search completed: December 3, 2004, 00:55:37
 Job time: 66.2295 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTKGENTFDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	211	100.0	226 2 A53892	prion-related prot
2	211	100.0	232 2 S71041	major prion protei
3	211	100.0	241 2 S71048	major prion protei
4	211	100.0	241 2 S71056	major prion protei
5	211	100.0	245 2 S71045	major prion protei
6	211	100.0	253 1 UHHU	major prion protei
7	211	100.0	253 2 I84423	major prion protei
8	211	100.0	253 2 S71055	major prion protei
9	211	100.0	253 2 S53635	prion protein - si
10	211	100.0	253 2 I77032	major prion protei
11	211	100.0	253 2 I61847	major prion protei
12	211	100.0	254 2 B34759	prion protein - ch
13	211	100.0	254 2 A34759	prion protein - ch
14	211	100.0	254 2 A23544	major prion protei
15	210	99.5	252 2 I51848	major prion protei
16	209	99.1	264 2 S71137	prion protein - gr
17	206	97.6	245 2 S53627	major prion protei
18	206	97.6	252 2 S53634	major prion protei
19	206	97.6	252 2 S53631	major prion protei
20	206	97.6	252 2 S53624	major prion protei
21	206	97.6	253 2 S53620	major prion protei
22	206	97.6	253 2 S53625	major prion protei
23	206	97.6	253 2 S53617	major prion protei
24	206	97.6	253 2 S53614	major prion protei
25	206	97.6	253 2 S53616	major prion protei
26	206	97.6	253 2 S53618	major prion protei
27	206	97.6	253 2 S53619	major prion protei
28	206	97.6	254 1 UHHYH	major prion Prp-Sc
29	206	97.6	254 1 UHHYH	major prion Prp-Sc

30	206	97.6	256 2 JU0268	major prion protei
31	206	97.6	257 2 A23545	major prion Prp27-
32	206	97.6	264 2 A54330	major prion protei
33	205	97.2	256 2 S37149	prion protein - go
34	205	97.2	256 2 A54281	major prion protei
35	205	97.2	260 2 S53629	major prion protei
36	203	96.2	257 2 JU01900	major prion protei
37	202	95.7	239 2 S53633	major prion protei
38	200	94.8	252 2 JC6175	prion protein - ra
39	61	28.9	267 1 U7CH	major prion protei
40	61	28.9	267 2 A37372	prion protein homo
41	61	28.9	273 2 A46280	prion protein - ch
42	58	27.5	139 2 H90004	hypothetical prote
43	57	27.0	853 2 T08162	amyloidpulanase (
44	56	26.5	511 2 C69199	phenylalanine-tRNA
45	55	26.1	648 2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1
A53892
prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A:Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; PMID:88037055; PMID:2889848
A:Accession: A53892
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LIA>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C:Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 8, 6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENTFDVKMERVVEQ 40
DB 145 NNFVHDCVNITIKQHTVTTTKGENTFDVKMERVVEQ 184

RESULT 2
S71041
major prion protein - black-handed spider monkey (fragment)
C:Species: Ateles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71041; S53630
R:Scharz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437
R:Scharz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53630
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, 'R', 196-221 <SCH>
A:Cross-references: EMBL:U08309
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 8, 8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 157 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 196

RESULT 3

S71048

major prion protein - Calliobus moloch (fragment)
C/Species: Calliobus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71048; S53632
R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71048
A/Molecule type: DNA
A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53632
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 166 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71056; S53621
R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71056
A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g4743
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 241;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 166 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 205

DB 166 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 5

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71045; S53628
R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g4743
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53628
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 245;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 165 NNFWHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 204

RESULT 6

U0810

major prion protein precursor - human
N/Alternate names: 11k amyloid protein; 27-30kialoglycoprotein; PrP 27-30; PrP 33-35C;
C/Species: Homo sapiens (man)
C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C/Accession: A24173; A40372; A50517; S14078; I54322; I65597; I58135; I59184; I79633; I796
DNA 5, 315-324, 1986
R/Kretschmar, H.A.; Stowling, L.E.; Westaway, D.; Stubblefield, W.H.; Prusiner, S.B.; De
A/Title: Molecular cloning of a human prion protein cDNA.
A/Reference number: A24173; MUID:86300093; PMID:3755672
A/Accession: A24173
A/Molecule type: mRNA
A/Residues: 1-253 <KRB>
A/Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
Am. J. Hum. Genet. 49, 320-329, 1991
A/Title: Genomic structure of the human prion protein gene.
A/Reference number: A40372; MUID:91328137; PMID:1678248
A/Accession: A40372
A/Status: not compared with conceptual translation
A/Molecule type: DNA
A/Residues: 1-80, 89-253 <PUC>
A/Cross-references: GB:X83416; NID:g47846; PIDN:CAA58442.1; PID:g47847
R/Liao, Y.C.; Lebo, R.V.; Clawson, G.A.; Smucker, E.A.
Science 233, 364-367, 1986
A/Reference number: A05017; MUID:66261778; PMID:3014653
A/Accession: A05017
A/Molecule type: mRNA
A/Residues: 8-117, 119-253 <LIA>
A/Cross-references: GB:D00015; NID:g220015; PIDN:BA00011.1; PID:g220016; GB:M13667; NID:
EMBO J. 10, 513-519, 1991
A/Title: Amyloid protein of Gerstmann-Strausner-Scheinker disease (Indiana kindred) is
A/Reference number: S14078; MUID:91160504; PMID:1672107

A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72,'X',74-76,'XX',79,'XXX',83-86,111-128,'V',130-150 <TAG>
R:Didrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: 154322; MUID:93250789; PMID:1363802
A:Accession: 154322
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83,92-240 <RBS>
A:Cross-references: GB:M01929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: 168597
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <R3>
A:Cross-references: GB:M01930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: 158135; MUID:92140671; PMID:11761177
A:Accession: 158135
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91,'PHCGGCGOHGGGCGOPHGGGCGOPHGGGCGOPHGGGCGOPHGGG' <R2>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AAB21334.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldsaber, D.; Swergold, G.D.; Wills, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 89, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, &
A:Reference number: 159184; MUID:92073400; PMID:1683708
A:Accession: 159184
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GGU>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID:
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRP
A:Cross-references: GDB:120720, OMIM:176640, OMIM:137440
A:Map position: 20pter-20p12
A:Introns: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl
F:1-22/DNA: signal sequence #status predicted <SIG>
F:23-230/Product: major prion protein #status predicted <M>
F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
F:231-253/DNA: carboxyl-terminal propeptide #status predicted <TP>
F:179-214/DNA: disulfide bonds; #status predicted
F:181,197/Binding site: carboxylate (Asn) (covalent) #status predicted
F:210/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

A: Molecule type: DNA
A: Residues: 1-253 <RES>
A: Cross-references: UNIPROT:P40254; EMBL:U015163; NID:G9595850; PIDN:AAA68635.1; PID:G9595850
U. Mol. Biol. 245, 362-374, 1995
R. Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
A: Title: Prion protein gene variation among primates.
A: Reference number: S53614; MUID:95139066; PMID:7837269
A: Accession: S53622
A: Status: nucleic acid sequence not shown
A: Molecule type: DNA
A: Residues: 1-210, 'R', 212-253 <SCH>
A: Cross-references: EMBL:U08307
R. Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A: Reference number: S71041
A: Accession: S71054
A: Molecule type: DNA
A: Residues: 1-253 <SCH>
A: Cross-references: EMBL:U08307; NID:G474372; PIDN:AAC50095.1; PID:G474373
C: Superfamily: major prion protein
C: Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9, 7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNPFVHDCVNIITKQHTVTTTNGENFTETDVKKMERVVEQ 40
|||||
Db 173 NNPFVHDCVNIITKQHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 8
S71055
major prion protein - pig-tailed macaque
C: Species: Macaca nemestrina (pig-tailed macaque)
C: Date: 14-Feb-1997 #sequence _revision 14-Feb-1997 #text_change 09-Jul-2004
C: Accession: S71055; S53626
R. Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A: Reference number: S71041
A: Accession: S71055
A: Molecule type: DNA
A: Residues: 1-253 <SCH>
A: Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AAC50094.1; PID:G474373
R. Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A: Title: Prion protein gene variation among primates.
A: Reference number: S53614; MUID:95139066; PMID:7837269
A: Accession: S53626
A: Status: nucleic acid sequence not shown
A: Molecule type: DNA
A: Residues: 8-210, 'R', 212-247 <SCW>
A: Cross-references: EMBL:U08306
C: Superfamily: major prion protein
C: Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9, 7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNPFVHDCVNIITKQHTVTTTNGENFTETDVKKMERVVEQ 40
|||||
Db 173 NNPFVHDCVNIITKQHTVTTTNGENFTETDVKKMERVVEQ 212

RESULT 9
S53635
prion protein - siamang
C: Species: Hylobates syndactylus (siamang)
C: Date: 15-Jul-1995 #sequence _revision 19-Apr-1996 #text_change 09-Jul-2004
C: Accession: S53635
R. Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837289
A/Accession: S53615
A/Status: nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:9474374; PIDN:AA50096.1; PID:94743
A/Note: the source was designated as *Symphalangus syndactylus*
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 10

major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: I37032
R/Cervanaka, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:9563208; PIDN:AA68633.1; PID:95632
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 11

major prion protein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: I61847; S71060; S53615
R/Cervanaka, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I61847
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:9609303; PIDN:AA68632.1; PID:96093
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71060
A/Molecule type: DNA
A/Residues: 1-253 <SCW>
A/Cross-references: EMBL:U08296; NID:9474350; PIDN:AA50085.1; PID:9474351
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53615

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-210; R, 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 12

prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M3959; NID:9191182; PIDN:AAA37014.1; PID:9191183
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 254;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 13

prion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:Q60506; GB:M3958; NID:9191180; PIDN:AAA37013.1; PID:9387056
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 254;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGKGFETDVKKMERVVEQ 212

RESULT 14

major prion protein precursor - mouse
N/Alternate names: PrP, Scrapie prion
C/Species: Mus musculus (house mouse)

C>Date: 22-Jul-1987 #sequence revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; S02521; A22315

R/Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; PMID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <MES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:g200528; PIDN:AAA3997.1; PID:g200529

A/Experimental source: strains NZW and I/LmJ

A/Note: the sequence shown is from the NZW strain; the sequence from the I/LmJ strain di

R/Loch, C.; Chesebro, B.; Race, R.; Keith, J.M.

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; PMID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, U.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (Prp) in mouse brain a

A/Reference number: S02521; PMID:88166695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u

A/Reference number: A22315; PMID:85213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHB>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <SIG>

F/23-231/Product: major prion protein #status predicted <MAT>

F/232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>

F/178-213/Disulfide bonds: #status predicted

F/180-196/Binding site: carbohydrate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 100.0%; Score 211; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 9.7e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 211

RESULT 15

major prion protein precursor - common squirrel monkey

C/Species: Samitri sciurus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: I61848

R/Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental t

A/Reference number: I36907; PMID:95083661; PMID:7991600

A/Accession: I61848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:g5595852; PIDN:AAA68636.1; PID:g55958

C/Superfamily: major prion protein

Query Match 99.5%; Score 210; DB 2; Length 252;

Best Local Similarity 97.5%; Pred. No. 1.3e-19;

Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 40

Db 172 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 211

Db 172 NNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQ 211

Search completed: December 3, 2004, 00:38:38
Job time: 12 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKKHTTTTKGKNTFEDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_02.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	232	1	PRI0_ATBGE
2	211	100.0	238	1	PRI0_CERAT
3	211	100.0	238	1	PRI0_THREE
4	211	100.0	238	2	Q86XRI
5	211	100.0	240	2	Q8VHV4
6	211	100.0	241	1	PRI0_CAIMO
7	211	100.0	241	1	PRI0_MANSF
8	211	100.0	245	1	PRI0_CERAE
9	211	100.0	246	1	PRI0_CERMO
10	211	100.0	246	1	PRI0_CERNE
11	211	100.0	246	1	PRI0_CERPO
12	211	100.0	246	1	PRI0_ERYRA
13	211	100.0	246	2	AA083636
14	211	100.0	248	2	Q8VHV5
15	211	100.0	252	1	PRI0_CALYA
16	211	100.0	252	1	PRI0_CEBAP
17	211	100.0	253	1	PRI0_COLGU
18	211	100.0	253	1	PRI0_GORCO
19	211	100.0	253	1	PRI0_HUMAN
20	211	100.0	253	1	PRI0_HYLLA
21	211	100.0	253	1	PRI0_HYLSY
22	211	100.0	253	1	PRI0_MACFA
23	211	100.0	253	1	PRI0_PANTR
24	211	100.0	253	1	PRI0_PONRY
25	211	100.0	253	1	PRI0_PPRFR
26	211	100.0	253	2	Q6FGR8
27	211	100.0	253	2	Q6L199
28	211	100.0	253	2	Q9Z0T5
29	211	100.0	253	2	AA580162
30	211	100.0	253	2	AA12192
31	211	100.0	254	1	PRI0_CRIGR

32	211	100.0	254	1	PRI0_CRIMI	Q60468 cricculus
33	211	100.0	254	1	PRI0_MOUSE	P04925 mus musculus
34	211	100.0	254	1	PRI0_RAT	P13852 rattus norv
35	211	100.0	254	1	PRI0_SIGHI	Q92003 sigmodon hi
36	211	100.0	254	2	Q9Z0T4	Q92004 sigmodon fu
37	211	100.0	254	2	Q8VHV6	Q8VHV6 apodemus sy
38	211	100.0	254	2	AA019993	AA019993 rattus no
39	211	100.0	277	2	Q6SEB1	Q6SEB1 homo sapien
40	211	100.0	277	2	AA021603	AA021603 homo sapi
41	211	100.0	285	2	Q75942	Q75942 homo sapien
42	210	99.5	220	2	Q86CW7	Q86CW7 ochotona pr
43	210	99.5	248	2	Q866V6	Q866V6 diceros bic
44	210	99.5	260	1	PRI0_SAIISC	P40258 saimiri bci
45	209	99.1	215	2	Q811W3	Q811W3 spalax leuc

ALIGNMENTS

```

RESULT 1
PRI0_ATBGE STANDARD; PRT; 232 AA.
ID PRI0_ATBGE
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Ateles geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler Syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC
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CC -----
CC EMBL: U08309; AAC50097.1; -.
CC PIR: S71041; S71041.
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prion octapep; 5.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00706; PRION_2; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC DR Glycoprotein; 1.
CC FM Non-ter 1
CC SIGNAL. 15 By similarity.
CC CHAIN. 16 Major prion protein.
CC PROPEP. 215 Removed in mature form (By similarity).
CC LIPID. 214 GPI-anchor amidated serine (By

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FT DISULFID 163 198 similarity.
FT CARBOHYD 165 198 By similarity.
FT CARBOHYD 165 198 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 181 181 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 51 0.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT NON TER 232 232 4.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 211; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 3.5e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTKKHTTTTGGNTFTDVKMERVVEQ 40
Db 157 NNFVHDCVNTTKKHTTTTGGNTFTDVKMERVVEQ 196

RESULT 2
PRIO CERAT STANDARD; PRT; 238 AA.
AC 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrP;
OS Cercopithecus aethiops, and
OC Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxId=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyf A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; Prion_1; 1.
CC PROSITE; PS00706; Prion_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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FT NON TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EBC3E3531B CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNTTKKHTTTTGGNTFTDVKMERVVEQ 40
Db 158 NNFVHDCVNTTKKHTTTTGGNTFTDVKMERVVEQ 197

RESULT 3
PRIO THEGE STANDARD; PRT; 238 AA.
AC 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrP; Synonyms=PrP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OC NCBI_TaxId=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyf A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@sib-sib.ch.)
CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; Prion_1; 1.

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER
FT SIGNAL.
FT CHAIN
FT PROPEP
FT DISULFID
FT LIPID
FT CARBOHYD
FT CARBOHYD
FT DOMAIN
FT REPEAT
FT REPEAT
FT REPEAT
FT REPEAT
FT NON_TER
SQ SEQUENCE
  238 AA; 26104 MW; 5F59BF602243EDB CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 1; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 4
Q86XRI PRELIMINARY; PRT; 238 AA.
ID Q86XRI
AC Q86XRI;
DT 01-JUN-2003 (T-EMBLrel. 24, Created)
DT 01-JUN-2003 (T-EMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (T-EMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AAC83635.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE
  238 AA; 26108 MW; EC9FA42623F3BBAE CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 5
Q86VH4 PRELIMINARY; PRT; 240 AA.
ID Q86VH4
AC Q86VH4;

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DT 01-MAR-2002 (T-EMBLrel. 20, Created)
DT 01-MAR-2002 (T-EMBLrel. 20, Last sequence update)
DT 01-JUN-2003 (T-EMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRP;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE
  240 AA; 26308 MW; BCAEDD3F5F76693 CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 240;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 6
PRIO CALMO
ID PRIO CALMO
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Callitriche moloch (Duck's tit).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitriche;
OC Callitriche.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.W., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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DR EMBL: U08313; AAC50100.1; --
 DR PIR: S71048; S71048.
 DR HSSP: P23907; 1G04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; Prion octapep; 6.
 DR PROSITE: PS00291; PRION.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.
 FT NON_TER
 FT SIGNAL 1 1
 FT CHAIN <1 15 By similarity.
 FT PROPEP 16 223 Major prion protein.
 FT DISULFID 224 >241 Removed in mature form (By similarity).
 FT LIPID 172 207 By similarity.
 FT 223 223 GPI-anchor amidated serine (By
 FT CARBOHYD 174 174 similarity).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 FT NON_TER 241 241 5.
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013E7CAEC93 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3,7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNTTKKHTVTTTGGNFETDVKMMERVVEQ 40
 DB 166 NNPFVHDCVNTTKKHTVTTTGGNFETDVKMMERVVEQ 205

RESULT 7
 ID PIRIO MANSP STANDARD; PRT; 241 AA.
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandrilus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandrillus.
 NCBI_TaxID=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE).

CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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DR EMBL: U08303; AAC50091.1; --
 DR PIR: S71056; S71056.
 DR HSSP: P23907; 1G04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; Prion octapep; 6.
 DR PROSITE: PS00291; PRION.
 DR PROSITE: PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 KW NON_TER
 FT SIGNAL 1 1
 FT CHAIN <1 15 By similarity.
 FT PROPEP 16 223 Major prion protein.
 FT LIPID 224 >241 Removed in mature form (By similarity).
 FT DISULFID 172 207 GPI-anchor amidated serine (By
 FT CARBOHYD 174 207 similarity).
 FT CARBOHYD 190 190 By similarity.
 FT DOMAIN 44 84 N-linked (GlcNAc...) (Potential).
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 FT NON_TER 241 241 5.
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3,7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNTTKKHTVTTTGGNFETDVKMMERVVEQ 40
 DB 166 NNPFVHDCVNTTKKHTVTTTGGNFETDVKMMERVVEQ 205

RESULT 8
 ID PIRIO CERAE STANDARD; PRT; 245 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN Name=PRNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_TaxID=9534; 36224;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called

```

CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL: U08291; AAC50080.1; -.
DR      EMBL: U08292; AAC50081.1; -.
DR      PIR: S53627; S53627.
DR      PIR: S71045; S71045.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00391; Prion; 1.
DR      Pfam: PF00391; Prion octapep; 5.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
DR      KMW: Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL 1 22
FT      CHAIN 23 222
FT      PROPEP 223 245
FT      LIPID 222 222
FT      DISUPID 171 206
FT      CARBOHYD 173 173
FT      CARBOHYD 189 189
FT      DOMAIN 51 83
FT      REPEAT 51 59
FT      REPEAT 60 67
FT      REPEAT 68 75
FT      REPEAT 76 83
SQ      SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;
Query Match 100.0%; Score 211; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 3, 7e-19; Indels 0; Gaps 0;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 204

RESULT 9
PRIO_CERMO STANDARD; PRT; 246 AA.
ID P61762; Q95172; Q95173;
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."

```

```

RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      the European Bioinformatics Institute. There are no restrictions on its
CC      use by non-profit institutions as long as its content is in no way
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL: U75386; AAB50625.1; -.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00377; Prion; 1.
DR      Pfam: PF00391; Prion octapep; 6.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
DR      KMW: Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL 1 15
FT      CHAIN 16 223
FT      PROPEP 224 246
FT      LIPID 223 223
FT      DISUPID 172 207
FT      CARBOHYD 174 174
FT      CARBOHYD 190 190
FT      DOMAIN 44 84
FT      REPEAT 44 52
FT      REPEAT 53 60
FT      REPEAT 61 68
FT      REPEAT 69 76
FT      REPEAT 77 84
SQ      SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3, 8e-19; Indels 0; Gaps 0;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 10
PRIO_CERNE STANDARD; PRT; 246 AA.
ID P61762; Q95172; Q95173;
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (Debrassa's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OC NCBI_TaxID=36227;
RN [1]
RP SEQUENCE FROM N.A.

```

RA van der Kuyl A.C., Dekker J.T., Goudamit J.,
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rod".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U75387; AAB50626.1; -.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNFFVHDCVNTTIKQHTVTTTKGENTETDVKMERVVEQ 40
DB 166 NNFFVHDCVNTTIKQHTVTTTKGENTETDVKMERVVEQ 205
RESULT 11
PRIO_CERTO STANDARD; PRT; 246 AA.
ID PRIO_CERTO
AC Q95176;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.

OX NCBI_TaxID=9531;
RN [1]
RA SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.,
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rod".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U75385; AAB50628.1; -.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
SQ SEQUENCE 246 AA; 26914 MW; F58679CBBCSADCT CRC64;
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNFFVHDCVNTTIKQHTVTTTKGENTETDVKMERVVEQ 40
DB 166 NNFFVHDCVNTTIKQHTVTTTKGENTETDVKMERVVEQ 205
RESULT 12
PRIO_BRYPA STANDARD; PRT; 246 AA.
ID PRIO_BRYPA
AC Q95174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Erythrocybus patas (Red guenon) (Cercopithecus patas).

CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecoidea; Erythrocebus.
 CC NCBI_TaxID=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudsmit J.,
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC or send an email to license@sib-sib.ch).
 CC -----
 CC EMBL: U75388; AAB50627.1; -.
 CC HSP: P23907; I604.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL 1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 FT SEQUENCE 246 AA; 26886 MW; D35D105BHEC53108 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVEQ 40
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVEQ 205
 RESULT 13
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (Tremblrel. 27, Created)
 DT 02-MAR-2004 (Tremblrel. 27, Last sequence update)
 DT 02-MAR-2004 (Tremblrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 CC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.,
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 CC
 CC EMBL: AY219883; AAO83636.1; -.
 CC Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 FT SEQUENCE 246 AA; 26884 MW; 309B1B13C0841566 CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVEQ 40
 DB 166 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVEQ 205
 RESULT 14
 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (Tremblrel. 20, Created)
 DT 01-MAR-2002 (Tremblrel. 20, Last sequence update)
 DT 01-JUN-2003 (Tremblrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 CC Clethrionomys.
 CC NCBI_TaxID=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.,
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC EMBL: AF367624; AAL57231.1; -.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC SMART: SM00157; PrP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion.
 FT NON_TER 248 248
 FT SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFTEIDVKMERVEQ 212
 RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUN-2004 (Rel. 44, last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Callithrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrich.
OX NCBI_TaxID=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.R., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U08304; AAC50092.1; -.
DR PIR: S53634; S53634.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03977; Prion; 1.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00391; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SROUNCE 252 AA; 27639 MW; B280B60F5DCB64 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 3.9e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Search completed: December 3, 2004, 00:35:28
 Job time: 64.6557 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGKFNFTETDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database:

Issued Patents AA: *
1: /cgn2_6/prodata/1/iaa/5A_COMB.pep: *
2: /cgn2_6/prodata/1/iaa/5B_COMB.pep: *
3: /cgn2_6/prodata/1/iaa/5A_COMB.pep: *
4: /cgn2_6/prodata/1/iaa/5B_COMB.pep: *
5: /cgn2_6/prodata/1/iaa/5A_COMB.pep: *
6: /cgn2_6/prodata/1/iaa/5B_COMB.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	142	1	US-08-556-823-10
2	211	100.0	245	4	US-09-431-887-5
3	211	100.0	245	4	US-09-431-887-15
4	211	100.0	252	4	US-09-431-887-13
5	211	100.0	252	4	US-09-431-887-17
6	211	100.0	253	1	US-08-242-188-2
7	211	100.0	253	1	US-08-509-261A-2
8	211	100.0	253	1	US-08-660-626-8
9	211	100.0	253	1	US-08-692-892-2
10	211	100.0	253	2	US-08-713-939A-2
11	211	100.0	253	2	US-08-868-162A-22
12	211	100.0	253	3	US-09-031-168-8
13	211	100.0	253	3	US-09-128-450-10
14	211	100.0	253	3	US-09-036-579-2
15	211	100.0	253	3	US-09-823-494-20
16	211	100.0	253	3	US-09-550-374-2
17	211	100.0	253	4	US-09-431-887-1
18	211	100.0	253	4	US-09-431-887-2
19	211	100.0	253	4	US-09-431-887-3
20	211	100.0	253	4	US-09-431-887-4
21	211	100.0	253	4	US-09-431-887-7
22	211	100.0	253	4	US-09-431-887-8
23	211	100.0	253	4	US-09-431-887-9
24	211	100.0	253	4	US-09-431-887-10
25	211	100.0	253	4	US-09-431-887-11
26	211	100.0	253	4	US-09-431-887-12
27	211	100.0	253	4	US-09-431-887-14

28	211	100.0	253	4	US-09-431-887-16	Sequence 16, Appl
29	211	100.0	253	4	US-09-431-887-18	Sequence 18, Appl
30	211	100.0	253	4	US-09-431-887-19	Sequence 19, Appl
31	211	100.0	253	4	US-09-943-906-2	Sequence 2, Appl
32	211	100.0	253	4	US-09-669-516C-8	Sequence 8, Appl
33	211	100.0	253	4	US-09-919-172-57	Sequence 57, Appl
34	211	100.0	253	4	US-09-976-594-72	Sequence 72, Appl
35	211	100.0	253	4	US-09-904-987-3	Sequence 3, Appl
36	211	100.0	254	1	US-08-242-188-1	Sequence 1, Appl
37	211	100.0	254	1	US-08-509-261A-1	Sequence 1, Appl
38	211	100.0	254	1	US-08-660-626-7	Sequence 7, Appl
39	211	100.0	254	1	US-08-692-892-1	Sequence 1, Appl
40	211	100.0	254	2	US-08-713-939A-1	Sequence 1, Appl
41	211	100.0	254	2	US-08-868-162A-21	Sequence 21, Appl
42	211	100.0	254	3	US-09-031-168-7	Sequence 7, Appl
43	211	100.0	254	3	US-09-128-450-19	Sequence 19, Appl
44	211	100.0	254	3	US-09-128-450-28	Sequence 28, Appl
45	211	100.0	254	3	US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
APPLICANT: Fred E. Cohen
TITLE OF INVENTION: Formation and use of prion protein
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
FAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 211; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 3.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKQHTVTTTGGKFNFTETDVKKMERVVEQ 40
DB 84 NNFVHDCVNITIKQHTVTTTGGKFNFTETDVKKMERVVEQ 123

RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 165 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 204

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 165 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 204

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 172 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 211

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 40
DB 172 NNFVHDCVNTTKKHTVTTTGGNFETDVKMERVVEQ 211

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Karl Bobicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bobicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bobicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bobicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5769655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

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APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTION PRIONS IN A SAMPLE AND
NUMBER OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSER: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846513
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSER: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

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TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFTEPDVKMERVVEQ 40
DB 173 NNFVHDCVNTIKQHTVTTTGGNFTEPDVKMERVVEQ 212

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFTEPDVKMERVVEQ 40
DB 173 NNFVHDCVNTIKQHTVTTTGGNFTEPDVKMERVVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 621149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suetete
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTIKQHTVTTTGGNFTEPDVKMERVVEQ 40
DB 173 NNFVHDCVNTIKQHTVTTTGGNFTEPDVKMERVVEQ 212

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Burton, Dennis R.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match

Best Local Similarity 100.0%; Score 211; DB 3; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 212

RESULT 15

US-09-823-494-20
Sequence 20; Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Pricha, Suesette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match

Best Local Similarity 100.0%; Score 211; DB 3; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 212

Search completed: December 3, 2004, 00:18:55
Job time: 15.1475 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-2_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTGTGENTEDVKKMERVQ 40

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Gapop 10.0 , Gapext 0.5

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Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

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11: /cgn2_6/ptodata/1/pubpaa/US09C_NEW_PUB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
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16: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep:*
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20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	211	100.0	117	14	US-10-050-902-348
2	211	100.0	117	14	US-10-050-898-348
3	211	100.0	117	14	US-10-346-190-89
4	211	100.0	124	14	US-10-050-902-324
5	211	100.0	124	14	US-10-050-898-324
6	211	100.0	124	14	US-10-346-190-93
7	211	100.0	141	16	US-10-612-356A-1
8	211	100.0	162	9	US-09-745-003-10
9	211	100.0	163	14	US-10-104-047-2013
10	211	100.0	164	9	US-09-745-003-12
11	211	100.0	200	16	US-10-470-848-10
12	211	100.0	208	16	US-10-470-848-3
13	211	100.0	208	17	US-10-745-393-1

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, App1
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, App1
16	211	100.0	225	14	US-10-301-488A-25	Sequence 25, App1
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, App1
18	211	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, App1
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, App1
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, App1
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, App1
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, App1
24	211	100.0	253	9	US-09-904-987-3	Sequence 3, App1
25	211	100.0	253	9	US-09-919-172-57	Sequence 57, App1
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, App1
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, App1
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, App1
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, App1
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, App1
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, App1
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, App1
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, App1
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, App1
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, App1
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, App1
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, App1
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, App1
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, App1
40	211	100.0	253	14	US-10-304-630-19	Sequence 19, App1
41	211	100.0	253	14	US-10-301-488A-21	Sequence 21, App1
42	211	100.0	253	14	US-10-301-488A-22	Sequence 22, App1
43	211	100.0	253	14	US-10-301-488A-32	Sequence 32, App1
44	211	100.0	253	14	US-10-410-907A-8	Sequence 8, App1
45	211	100.0	253	14	US-10-346-190-79	Sequence 79, App1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 52 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 91

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003015711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufendiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050, 898
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 52 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 91

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Eric
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
PRIOR FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 52 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 91

RESULT 4

US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050,902
PRIOR FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrP construct
US-10-050-902-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFDVCNITIKQHTVTTTGGNFETDVKMERVVEQ 92

RESULT 5

US-10-050-898-324
Sequence 324, Application US/10050898
Publication No. US2003017511A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin

APPLICANT: Tisot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrp
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 92

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Pilon Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,550
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrp
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 92

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lührs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such as pathogenic/infectious proteins, and their use
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 84 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 123

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 40
DB 82 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEQ 121

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

1 CURRENT APPLICATION NUMBER: US/10/104,047
2 CURRENT FILING DATE: 2002-03-25
3 PRIOR APPLICATION NUMBER:
4 PRIOR FILING DATE:
5 NUMBER OF SEQ ID NOS: 4096
6 SOFTWARE: PatentIn Ver. 2.1
7 SEQ ID NO 2013
8 LENGTH: 163
9 TYPE: PRF
10 ORGANISM: Homo sapiens
11 US-10-104-047-2013

Query Match
Best Local Similarity 100.0%; Score 211; DB 14; Length 163;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122

RESULT 10
US-09-745-003-12
1 Sequence 12, Application US/09745003
2 Patent No. US20020042122A1
3 GENERAL INFORMATION:
4 APPLICANT: Bazan, Fernando J
5 TITLE OF INVENTION: Human Proteins; Related Reagents
6 FILE REFERENCE: PRP2
7 CURRENT APPLICATION NUMBER: US/09/745,003
8 CURRENT FILING DATE: 2000-12-20
9 NUMBER OF SEQ ID NOS: 13
10 SOFTWARE: PatentIn Ver. 2.0
11 SEQ ID NO 12
12 LENGTH: 164
13 TYPE: PRF
14 ORGANISM: rodent
15 US-09-745-003-12

Query Match
Best Local Similarity 100.0%; Score 211; DB 9; Length 164;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 121

RESULT 11
US-10-470-848-10
1 Sequence 10, Application US/10470848
2 Publication No. US20040137421A1
3 GENERAL INFORMATION:
4 APPLICANT: President of Tohoku University
5 TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
6 FILE REFERENCE: PH-1224-PCF
7 CURRENT APPLICATION NUMBER: US/10/470,848
8 CURRENT FILING DATE: 2003-07-31
9 PRIOR APPLICATION NUMBER: JP 2001-24279
10 PRIOR FILING DATE: 2001-01-31
11 NUMBER OF SEQ ID NOS: 10
12 SOFTWARE: PatentIn Ver. 2.0
13 SEQ ID NO 10
14 LENGTH: 200
15 TYPE: PRF
16 ORGANISM: Homo sapiens
17 US-10-470-848-10

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 200;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40

Db 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 182

RESULT 12
US-10-470-848-3
1 Sequence 3, Application US/10470848
2 Publication No. US20040137421A1
3 GENERAL INFORMATION:
4 APPLICANT: President of Tohoku University
5 TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
6 FILE REFERENCE: PH-1224-PCF
7 CURRENT APPLICATION NUMBER: US/10/470,848
8 CURRENT FILING DATE: 2003-07-31
9 PRIOR APPLICATION NUMBER: JP 2001-24279
10 PRIOR FILING DATE: 2001-01-31
11 NUMBER OF SEQ ID NOS: 10
12 SOFTWARE: PatentIn Ver. 2.0
13 SEQ ID NO 3
14 LENGTH: 208
15 TYPE: PRF
16 ORGANISM: Homo sapiens
17 US-10-470-848-3

Query Match
Best Local Similarity 100.0%; Score 211; DB 16; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 13
US-10-745-393-1
1 Sequence 1, Application US/10745393
2 Publication No. US20040203131A1
3 GENERAL INFORMATION:
4 APPLICANT: Scholz, Elke
5 APPLICANT: Scholz, Christian
6 APPLICANT: Schaefer, Werner
7 TITLE OF INVENTION: Composites comprising a prion protein and peptidyl prolyl isomerase
8 FILE REFERENCE: 12290 US3 (9793/141)
9 CURRENT APPLICATION NUMBER: US/10/745,393
10 CURRENT FILING DATE: 2003-12-23
11 PRIOR APPLICATION NUMBER: EP 0115225.3
12 PRIOR FILING DATE: 2001-06-22
13 PRIOR APPLICATION NUMBER: EP 01120939.2
14 PRIOR FILING DATE: 2001-08-31
15 PRIOR APPLICATION NUMBER: US 10/167,774
16 PRIOR FILING DATE: 2002-06-10
17 PRIOR APPLICATION NUMBER: US 10/179,905
18 PRIOR FILING DATE: 2002-06-24
19 NUMBER OF SEQ ID NOS: 3
20 SOFTWARE: PatentIn version 3.1
21 SEQ ID NO 1
22 LENGTH: 208
23 TYPE: PRF
24 ORGANISM: Homo sapiens
25 US-10-745-393-1

Query Match
Best Local Similarity 100.0%; Score 211; DB 17; Length 208;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 14


```
US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-6

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 190

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 190

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Job time : 47.3443 secs
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221

Sequence: 1 SNQNNFVHDCVNITIKQHTV.....ENFTETDVAMERIVEQNCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

- 1: geneseqp1960s:*
- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	244	100.0	117	5	ABG94357 Modified
2	244	100.0	117	5	ABG80669 Human prl
3	244	100.0	117	7	ADD24196 Modified
4	244	100.0	142	2	AAW17686 Prion pro
5	244	100.0	163	7	ADB63859 Human pro
6	244	100.0	200	5	ABG31907 Human prl
7	244	100.0	208	3	ABAB07318 Human prl
8	244	100.0	208	5	ABG31902 Human prl
9	244	100.0	208	5	ABG31902 Monkey pr
10	244	100.0	245	4	AAW72352 Cercopit
11	244	100.0	253	2	AAW86715 Human prl
12	244	100.0	253	2	AAW69660 Human prl
13	244	100.0	253	2	AAW85901 Human prl
14	244	100.0	253	2	AAW85901 Human prl
15	244	100.0	253	2	AAW70994 Human prl
16	244	100.0	253	3	AAW81485 Human prl
17	244	100.0	253	3	AAW62722 Human prl
18	244	100.0	253	3	AAW15035 Human prl
19	244	100.0	253	3	AAW72347 Prion pro
20	244	100.0	253	4	AAW72353 Guezeza p
21	244	100.0	253	4	AAW72344 Rhesus mo
22	244	100.0	253	4	AAW72351 Hamadryas
23	244	100.0	253	4	AAW72348 Prion pro
24	244	100.0	253	4	AAW72346 Prion pro
25	244	100.0	253	4	AAW72355 Prion pro

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WO-1B000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;
XX
DR WPI: 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441BP; English.
XX
CC This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organism comprising
CC at least one first attachment site, where the organism is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 SQ

Query Match 100.0%; Score 244; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 46
 DB 49 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 2
 ABG80669
 ID ABG80669 standard; protein; 117 AA.
 XX
 AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)
 XX

Human prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutant;
 XX graft versus host disease; Igg-mediated allergic reaction; anaphylaxis;
 XX adult respiratory distress syndrome; ARDS; Crohn's disease;
 XX allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 XX Grave's disease; systemic lupus erythematosus; osteoporosis;
 XX inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 XX immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 XX angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 XX rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 XX enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.
 XX

PN MO200256907-A2.
 XX

PD 25-JUL-2002.
 XX

PF 21-JAN-2002; 2002MO-IB000168.
 XX

PR 19-JAN-2001; 2001US-0262379P.
 XX

PR 04-MAY-2001; 2001US-0288549P.
 XX

PR 05-OCT-2001; 2001US-032698P.
 XX

PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVA) NOVAARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTW) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX

PI Maurer P, Lechner F, Ortman R, Luboend R, Staufenbiel M, Frey P,

PI Renner WA, Bachmann M, Tisot A, Sebbel P, Piossek C;
 DR WPI; 2002-636514/68.
 XX

P7 Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX

PS Disclosure; Page 418; 418pp; English.
 XX

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, Igg-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 XX protein).

SQ Sequence 117 AA;

Query Match 100.0%; Score 244; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 46
 DB 49 SNQNNFVHDCVNTIKQHTVTTTGGNFETDVKMERVVEQMC 94

RESULT 3

ID ADD24196
 XX ADD24196 standard; protein; 117 AA.
 XX

AC ADD24196;
 XX

DT 15-JAN-2004 (first entry)
 XX

DE Modified human prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;
 XX first attachment site; antigen; antigenic determinant; prion protein;
 XX PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 XX prion disease; Bovine Spongiform Encephalopathy; BSE;
 XX Creutzfeldt-Jakob Disease; prion; mutant; mutain.

OS Synthetic.
 OS Prion.
 XX

PN MO2003059386-A2.
 XX

PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-BE000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 XX
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 XX
 Query Match 100.0%; Score 244; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 5.3e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTKQHTVTTTGGNFETDVKMERVEQMCI 46
 49 SNONNFVHDCVNTTKQHTVTTTGGNFETDVKMERVEQMCI 94
 DB
 RESULT 4
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX
 DT 14-JAN-1998 (first entry)
 XX
 DE Prion protein peptide Hu 90-231.
 XX
 KM Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 PN WO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96WO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX

PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 XX
 SQ Sequence 142 AA;
 XX
 Query Match 100.0%; Score 244; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 6.7e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNONNFVHDCVNTTKQHTVTTTGGNFETDVKMERVEQMCI 46
 81 SNONNFVHDCVNTTKQHTVTTTGGNFETDVKMERVEQMCI 126
 DB
 RESULT 5
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTRO2005570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX
 PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 DE (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Iisogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahara K, Masuno Y;
 XX
 DR WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 PS Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel

CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or peptide
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotide and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transduction-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumors). The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.

SQ Sequence 163 AA;

Query Match 100.0%; Score 244; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 7.8e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVQMERVVEQMC 46
 |||||
 Db 80 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVQMERVVEQMC 125

RESULT 6
 ID AAB07318 standard; protein; 200 AA.
 AC AAB07318;
 XX
 DT 05-NOV-2000 (first entry)
 XX
 DE Human prion protein related peptide #6.
 XX
 KW Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN MO200261418-A1.
 PD 08-AUG-2002.
 PF 31-JAN-2002; 2002MO-JP000803.
 PR 31-JAN-2001; 2001JP-00024279.
 PA (TOHO) UNIV TOHOKU.
 PI Kitamoto T, Miyoshi K, Mohri S;
 XX
 DR WPI; 2002-619277/66.
 XX

Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.
 XX
 PS Example 2; Page 63-64; 69pp; Japanese.
 XX

This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)

CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention

SQ Sequence 200 AA;

Query Match 100.0%; Score 244; DB 5; Length 200;
 Best Local Similarity 100.0%; Pred. No. 9.9e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVQMERVVEQMC 46
 |||||
 Db 140 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVQMERVVEQMC 185

RESULT 7
 ID AAB07318 standard; protein; 208 AA.
 AC AAB07318;
 XX
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Homo sapiens.
 XX
 PN
 PD
 PF
 PR
 PA (WALF-) WALFAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-387880/33.
 XX

Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 PT
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 XX

The present sequence is the human prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

Query Match 100.0%; Score 244; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONFVHDCVNTIKOHTVTTTGGNFETDVKMERVEQNCI 46
DB 148 SNONFVHDCVNTIKOHTVTTTGGNFETDVKMERVEQNCI 193

RESULT 8

AAB07329 standard; protein; 208 AA.

AC AAB07329;

DT 17-OCT-2000 (first entry)

XX Human prion protein sequence.

XX Human; prion protein; transmissible spongiform encephalopathy;

XX bovine spongiform encephalopathy; TSE diagnosis; PrP.

OS Homo sapiens.

XX Key Location/Qualifiers

FT Region /note="Repeat region consisting of tandem repeats of

FT Disulfide-bond 157..192

FT Modified-site 208

FT /note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

XX MO200029849-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99MO-FI000896.

XX 17-NOV-1998; 98FI-00002480.

XX (WALL-) WALLAC OY.

XX (BBSR-) BBSRC OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPI; 2000-399778/34.

XX New immunoassay for prion protein, used for determination of
transmissible spongiform encephalopathies in mammals, comprises specific
capture antibody.

XX Disclosure; Page 43-44; 50pp; English.

XX The present sequence is the human prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,
insoluble isoform is implicated in the pathogenesis of transmissible
spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
this protein in body fluid or tissue samples may be measured by an assay

XX of the present invention, in which a PrP epitope is captured by an
antibody, which is then detected. The presence of PrP indicates TSE. PrP

XX epitopes (AAB07320-B07326) are derived from the protease resistant core
of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

XX Query Match 100.0%; Score 244; DB 3; Length 208;

XX Best Local Similarity 100.0%; Pred. No. 1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONFVHDCVNTIKOHTVTTTGGNFETDVKMERVEQNCI 46
DB 148 SNONFVHDCVNTIKOHTVTTTGGNFETDVKMERVEQNCI 193

RESULT 9

ABG31902 standard; protein; 208 AA.

AC ABG31902;

DT 05-NOV-2002 (first entry)

XX Human prion protein related protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection;

XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX MO200261418-A1.

XX 08-AUG-2002.

XX 31-JAN-2002; 2002MO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

XX Kitamoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
prion protein sedimentation in non-human follicular dendritic cells as
PT indication, applicable in safety test on e.g. drugs and cosmetics.

XX Disclosure; Page 49-50; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
human prion disease infection factor in a sample by using abnormal prion

XX protein sedimentation in non-human follicular dendritic cells (FDC) as
CC indication. The method of the invention is useful for screening (non-)

XX human prion disease infection factor, which is applicable in safety tests
CC on drugs like blood preparations, foods and cosmetics, and for developing

XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC disease (CJD). The method of the invention is simple and quick. The

XX present sequence represents a human prion related protein of the
CC invention

XX Sequence 208 AA;

XX Query Match 100.0%; Score 244; DB 5; Length 208;

XX Best Local Similarity 100.0%; Pred. No. 1e-23;

XX Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONFVHDCVNTIKOHTVTTTGGNFETDVKMERVEQNCI 46
DB 148 SNONFVHDCVNTIKOHTVTTTGGNFETDVKMERVEQNCI 193

RESULT 10

AAB72342

ID AAB72342 standard; peptide; 245 AA.

AC AAB72342;

DT 06-AUG-2003 (revised)

DT 17-MAY-2001 (first entry)

XX

DE Monkey prion protein cellular form (PrPc) amino acid sequence.
 XX
 XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; Scrapie; monkey;
 KM bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 XX
 OS Primates.
 XX
 XX Key Location/Qualifiers
 FT Region 176..221
 FT /note="Stable region, specifically claimed in claim 3"
 XX
 XX WO200107479-A2.
 XX
 XX 01-FEB-2001.
 XX
 XX 25-JUL-2000; 2000MO-GB002873.
 XX
 XX 27-JUL-1999; 99GB-00017491.
 XX
 XX 30-JUL-1999; 99GB-00017878.
 XX
 XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 XX Collinge J, Clarke AR, Waltho JP, Jackson GS, Hoeszu LLP;
 XX
 XX WPI; 2001-168538/17.
 XX
 XX New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jakob disease in humans.
 XX
 XX Claim 3; Fig 5; 69pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC be used in the prevention, treatment or diagnosis of a prion disease
 CC e.g. spongiform encephalopathies, such as scrapie in sheep, bovine
 CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC monkey prion protein, the stable region of the protein may be used in the
 CC production of anti-PrPc antibodies. (Updated on 06-AUG-2003 to correct OS
 CC field.)
 CC
 CC Sequence 245 AA;
 SQ
 QY Query Match 100.0%; Score 244; DB 4; Length 245;
 DB Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFTEIDVKKMERVVEQWCI 46
 DB 162 SNQNNFVHDCVNTTIKQHTVTTTGGNFTEIDVKKMERVVEQWCI 207
 RESULT 11
 AAB72352 standard; peptide; 245 AA.
 XX
 AC AAB72352;
 XX
 DT 17-MAY-2001 (first entry)
 XX
 XX Cercopithecus prion protein cellular form (PrPc) amino acid sequence.
 XX
 XX Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KM prion disease; spongiform encephalopathies; Scrapie; monkey;
 KM bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 XX
 OS Cercopithecus sp.

XX
 XX Key Location/Qualifiers
 FT Region 176..221
 FT /note="Stable region, specifically claimed in claim 3"
 XX
 XX WO200107479-A2.
 XX
 XX 01-FEB-2001.
 XX
 XX 25-JUL-2000; 2000MO-GB002873.
 XX
 XX 27-JUL-1999; 99GB-00017491.
 XX
 XX 30-JUL-1999; 99GB-00017878.
 XX
 XX (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 XX Collinge J, Clarke AR, Waltho JP, Jackson GS, Hoeszu LLP;
 XX
 XX WPI; 2001-168538/17.
 XX
 XX New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jakob disease in humans.
 XX
 XX Claim 3; Fig 5; 69pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrPsc). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC be used in the prevention, treatment or diagnosis of a prion disease
 CC e.g. spongiform encephalopathies, such as scrapie in sheep, bovine
 CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC cercopithecus prion protein, the stable region of the protein may be used
 CC in the production of anti-PrPc antibodies
 CC
 CC Sequence 245 AA;
 SQ
 QY Query Match 100.0%; Score 244; DB 4; Length 245;
 DB Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFTEIDVKKMERVVEQWCI 46
 DB 162 SNQNNFVHDCVNTTIKQHTVTTTGGNFTEIDVKKMERVVEQWCI 207
 RESULT 12
 AAR86715 standard; protein; 253 AA.
 XX
 AC AAR86715;
 XX
 DT 15-OCT-1996 (first entry)
 XX
 XX Human prion protein, HuPrP.
 XX
 XX Chimeric gene; chimeric prion; transgenic animal; diagnosis;
 KM spongiform encephalopathy; PrP; central nervous system; CNS;
 KM Creutzfeldt-Jakob disease; CJD; BSE.
 XX
 XX Homo sapiens.
 XX
 XX WO9531466-A1.
 XX
 XX 23-NOV-1995.
 XX
 XX 10-APR-1995; 95WO-US004426.
 XX
 XX 13-MAY-1994; 94US-00242188.

XX (REGC) UNIV CALIFORNIA.
 PA Prusiner SB, Scott MR, Telling G;
 PI WPI, 1996-010868/01.
 XX
 DR Chimeric prion protein gene - for formation of a transgenic animal
 PT susceptible to prion infection by prion(s) normally specific for a
 PT different species.
 XX
 PS Disclosure, Page 41-42; 65pp; English.
 XX
 CC Pathogenic prions in a sample can be detected by injecting the sample to
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric
 CC PrP gene in which the gene includes a portion of a gene of the animal
 CC (e.g. human) in danger of infection from prions in the sample. Preferred
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment
 CC of the mouse PrP, MoPrP, is replaced with the corresponding human PrP
 CC sequence. The chimeric PrP, designated Mhu2MPp, differs from the MoPrP
 CC by 9 AA between residues 96 and 167
 CC
 XX Sequence 253 AA:
 SQ
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 215
 RESULT 13
 AAM69660
 ID AAM69660 standard; protein; 253 AA.
 XX
 AC AAM69660;
 XX
 DT 25-MAR-2003 (revised)
 DT 19-OCT-1998 (first entry)
 DE Human prion protein HuPrP.
 XX
 KM Human; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease.
 OS Homo sapiens.
 OS
 XX US5792901-A.
 PN
 XX 11-AUG-1998.
 PD
 XX 30-JUL-1996; 96US-00692892.
 PF
 XX 13-MAY-1994; 94US-00242188.
 PR 31-JUL-1995; 95US-00509261.
 PR 31-AUG-1995; 95US-00521992.
 XX
 PA (REGC) UNIV CALIFORNIA.
 PA
 PI Scott MR, Telling GC, Prusiner SB;
 XX
 XX WPI, 1998-456207/39.
 DR
 PT Transgenic mouse with altered PrP gene - for detecting disease-causing
 PT prions.
 XX
 PS Example 8; Fig 3; 37pp; English.
 XX
 CC A transgenic mouse has been developed which comprises a genome in which
 CC both alleles of an endogenous PrP (prion protein) gene of the mouse are
 CC ablated, the genome containing operatively inserted all exogenous non-

CC mouse PrP gene. The mouse is susceptible to infection with prions which
 CC generally only infect a genetically diverse mammal due to the presence of
 CC the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
 CC symptoms of prion disease within 200 days or less after inoculation with
 CC prions which generally only infect a genetically diverse mammal. Also
 CC described in the present invention are: (A) a method of producing the
 CC transgenic mouse; and (B) determining the presence of infectious prions
 CC in a sample obtained from a bovine. The transgenic mouse is used to
 CC detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
 CC disease of humans caused by prions. The present sequence represents human
 CC prion protein (HuPrP), used in an example from the present invention.
 CC (Updated on 25-MAR-2003 to correct PF field.)
 CC
 XX Sequence 253 AA:
 SQ
 Query Match 100.0%; Score 244; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.3e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
 DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 215
 RESULT 14
 AAM85901
 ID AAM85901 standard; peptide; 253 AA.
 XX
 AC AAM85901;
 XX
 DT 12-FEB-1999 (first entry)
 DE Human prion protein (PrP) sequence.
 XX
 KM PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
 KM Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
 KM cosmetic; therapeutic; human.
 OS Homo sapiens.
 OS
 XX US5846533-A.
 PN
 XX 08-DEC-1998.
 PD
 XX 13-SEP-1996; 96US-00713939.
 PF
 XX 14-SEP-1995; 95US-00528104.
 PR
 XX (REGC) UNIV CALIFORNIA.
 PA (SCRI) SCRIPPS RES INST.
 PA
 PI Prusiner SB, Williamson RA, Burton DR;
 XX
 XX WPI, 1999-058996/05.
 DR
 XX Antibody specific for scrapie isoform of prion protein - useful for
 PT diagnosis and therapy.
 PT
 PS Disclosure, Col 41-42; 58pp; English.
 XX
 CC This represents a human prion protein (PrP) sequence. The invention
 CC relates to an antibody that is capable of binding to native PrP(Sc), the
 CC scrapie isoform of PrP. The antibody is produced by a method that
 CC comprises synthesizing a library of antibodies on phages, contacting the
 CC phages with a composition containing PrP proteins, isolating phages that
 CC bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
 CC and optionally analyzing the phages to determine a nucleic acid sequence
 CC encoding an amino acid sequence to which the native PrP(Sc) binds. The
 CC antibody is used to detect disease-associated PrP, especially in
 CC Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
 CC can also be used to neutralize the infectivity of PrP(Sc). Assays using
 CC the antibodies can be used to screen for disease-associated PrP in
 CC pharmaceutical products, foods and cosmetics or for therapeutic purposes

XX
SQ Sequence 253 AA;

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTITTKGENTFETDVKMERVVEQMC 46
DB 170 SNQNNFVHDCVNTTIKQHTVTITTKGENTFETDVKMERVVEQMC 215

RESULT 15

AA07994
ID AA07994 standard; protein; 253 AA.

XX
AC AA07994;

XX
DT 08-JUL-1999 (first entry)

XX
DE Human prion protein.

XX
KW Prion protein; PrP; human; polyclonal antiserum; immunoassay; detection;
XX bovine; murine.

XX
OS Homo sapiens.

XX
PN DE1974543-A1.

XX
PD 22-APR-1999.

XX
PF 15-OCT-1997; 97DE-01045443.

XX
PR 15-OCT-1997; 97DE-01045443.

XX
PA (HERZ/) HERZOG-MESMER A.

XX
PI Meesmer AH, Kiselev OI, Scheller A;

XX
DR WP; 1999-255775/22.

XX
PT Diagnostic polyclonal antiserum specific for prion protein - obtained by
XX immunisation with metal-containing polypeptide.

XX
PS Claim 3; Fig 1; 12pp; German.

XX
CC This invention describes a novel process for producing a polyclonal
CC antiserum against a human or animal prion protein (PrP) which can be used
CC in immunoassays for detecting PrP's. The method comprises (a) selecting a
CC polypeptide that has a length of at least 10 amino acids and has an amino
CC acid sequence at least 70% homologous to that of human, bovine or murine
CC PrP in a region of at least 10 consecutive amino acids (b) binding a
CC metal to the polypeptide by reaction with a metal compound and (c)
CC injecting the metal-containing polypeptide into a host animal, optionally
CC together with adjuvants, to induce production of a polyclonal antiserum
XX

SQ Sequence 253 AA;

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTITTKGENTFETDVKMERVVEQMC 46
DB 170 SNQNNFVHDCVNTTIKQHTVTITTKGENTFETDVKMERVVEQMC 215

Search completed: December 3, 2004, 00:55:38
Job time : 77.1639 secs

A:Cross-references: GB:X833416; NID:g747846; PIDN:CAA58442.1; PID:g747847
A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not
R:Liho, Y.C.;J., Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
Science 233, 364-367, 1986
A:Reference number: A05017; MUID:86261778; PMID:3014653
A:Accession: A05017

A:Residues: 8-117,119-253 <LIA>
A:Cross-references: GB:D00015; NID:G220015; PIDN:BA00011.1; PID:G220016; GB:M1367; NI:G220016; F: Prelll. F.: Critic. T.: Burdard. A:Tagilavni.

A:Title: Amyloid protein of Gerstmann-Strauszler-Scheinker disease (Indiana kindred) 1
A:Reference number: S14078; MUID:91160504; PMID:1672107
A:Accession: S14078

A. Title: Deletion in the prion protein gene in a demented patient.
Hum. Mol. Genet. 1, 443-444, 1992

A/Accession: F54322; MOL:39230/89; PMID:1363802
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA

A/Cross-references: GB:M81929, NID:g190517, PIDN:AA859442.1, PID:g190518
A/Accession: 168597
A/Status: translated from GB/EMBL/DDRI

A:Residues: 8-240 <RE3>
A:Cross-references: GB:W61930; NID:g190519; PIDN:AAB59443.1; PID:g190520
P:Brown, P.; Goldfarb, L.G.; McCombie, W.R. Nucleic Acids Res. 1981; 9:1111-1122

A:Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: 158135; MUID:92140671; PMID:1736177
A:Accession: 158135

A:Molecule type: DNA
A:Residues: 51-91, PHGGGWMGORPHGGGMQORPHGGGMQORPHGGGMQORPHGGG'
A:Cross-references: GB:S80539; NID:Q244669; PDB:1aar1t34_1.pdb<RE2>

A:Title: Transmissible familial Creutzfeldt-Jakob disease associated with flye, seven, a
 A:Reference number: I59184; MUID:92073400; PMID:1683708
 A:Accession: I59184

A:Molecule type: DNA
 A:Residues: 60-67 <GOL>
 A:Cross-references: GB:571308; NID:G239877; PTSD.AA020531.1; PIR:G30050
 ...

A:Gene: GDB:PRNP; CJD, PRIP
 A:Cross-references: GDB:120720; OMIM:176640; OMIM:137440
 A:Map position: 20pter-20p12

\Note: one intron occurs before the initiator codon
 \Note: this gene is associated with Creutzfeld-Jakob disease (CJD), Gerstmann-Sträussler
 \Superfamily: major prion protein

11-22/Domain: signal sequence #status predicted <SIG>
23-230/Product: major prion protein #status predicted <MAT>
34-92/Region: 8-residue repeats (P-H-G-G-G-W-G-Q)

Protein	Site	Residue	Modification	Enzyme	Substrate	Product	Reaction	Enzyme	Substrate	Product	Reaction
179-214/DnaL	179-214	DnaL	phosphate	phosphate	phosphate	phosphate	phosphate	phosphate	phosphate	phosphate	phosphate
181,197/Binding	181,197	Binding	carboxylate	carboxylate	carboxylate	carboxylate	carboxylate	carboxylate	carboxylate	carboxylate	carboxylate
230/Modified	230	Modified	GPI anchor	ethanolamine	amidated	carboxyl	and	and	and	and	and

Query Match	100.0%	Score 244	DB 1	Length 253
Best Local Similarity	100.0%	Pred. No. 1.5e-22		
Matches 46	Conservative 0	Mismatches 0	Indels 0	Cuts 0

1 SNQNNFHDVCNITIKOHTVTTTTKGENFTETDVKKMERVVEQMCJ 46
170 SNQNNFHDVCNITIKOHTVTTTTKGENFTETDVKKMERVVEQMCJ 215

QY 1 SNQNNFVHDCVNITIKOHTTTTNGENFTETDYKMERIVEQMCI 46
 |||||
Db 170 SNQNNFVHDCVNITIKOHTTTTNGENFTETDYKMERIVEQMCI 215

RESULT 5

184423

major prion protein precursor - rhesus macaque

C/Species: Macaca mulatta (rhesus macaque)

C/Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004

C/Accession: I61423; S53622; S71054

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: I61423

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PIDN:AAA68635.1; PID:G5958

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates

A/Reference number: S53614; PMID:95139066; PMID:7837269

A/Accession: S53622

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-210, R', 212-253 <SCH>

A/Cross-references: EMBL:U08307

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71054

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08307; NID:G474372; PIDN:AA050095.1; PID:G474373

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 215

RESULT 6

S71055

major prion protein - pig-tailed macaque

C/Species: Macaca nemestrina (pig-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71055; S53626

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71055

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AA050094.1; PID:G4743

R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates

A/Reference number: S53614; PMID:95139066; PMID:7837269

A/Accession: S53626

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-210, R', 212-247 <SCH>

A/Cross-references: EMBL:U08306

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 215

RESULT 7

137032

major prion protein precursor - gorilla

C/Species: Gorilla gorilla (gorilla)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: I37032

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: I37032

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:G563208; PIDN:AAA68633.1; PID:G5632

C/Superfamily: major prion protein

Query Match 100.0%; Score 244; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 1.5e-22;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 215

RESULT 8

A53892

prion-related protein - rat (fragment)

C/Species: Rattus norvegicus (Norway rat)

C/Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004

C/Accession: A53892

R/Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Burton, J.D.; Clawson, G.A.

Lab. Invest. 57, 370-374, 1987

A/Title: Cloning of rat "prion-related protein" cDNA.

A/Reference number: A53892; PMID:88037055; PMID:289848

A/Accession: A53892

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-226 <LIA>

A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392

C/Superfamily: major prion protein

Query Match 99.6%; Score 243; DB 2; Length 226;

Best Local Similarity 97.8%; Pred. No. 1.7e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 46

Db 142 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQMC1 187

RESULT 9

I61848

major prion protein precursor - common squirrel monkey

C/Species: Saimiri sciureus (common squirrel monkey)

C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004

C/Accession: I61848

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; PMID:95083661; PMID:7991600

A/Accession: I61848

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-252 <RES>

A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G595852; PIDN:AAA68636.1; PID:G5958

C/Superfamily: major prion protein

Query Match 99.6%; Score 243; DB 2; Length 252;
 Best Local Similarity 97.8%; Pred. No. 1.9e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46
 |||||
 DB 169 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 214

RESULT 10

A23544

Major prion protein precursor - mouse

N/Alternate names: PrP; Scrapie prion

C/Species: Mus musculus (house mouse)

C/Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; 502521; A22315

R/Westaway, D.; Goodman, P.A.; Mirenda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.

Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; MUID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <MES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200528

A/Experimental source: strains NZM and I/Lnd

A/Note: The sequence shown is from the NZM strain; the sequence from the I/Lnd strain is

Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, J.; Multhaupt, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain

A/Reference number: S02521; MUID:88166695; PMID:2894984

A/Accession: S02521

A/Molecule type: Protein

A/Residues: 1-254 <HOB>

R/Chesedro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and u

A/Reference number: A22315; MUID:85213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <GHE>

C/Suprafamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F:1-22/Dominant: signal sequence #status predicted <SIG>

F:232-254/Product: major prion protein #status predicted <MAT>

F:178-213/Dominant: carboxyl-terminal propeptide #status predicted <CTP>

F:180-196/Binding site: carbohydrate (Aan) (covalent) #status predicted

F:231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

Query Match 99.6%; Score 243; DB 2; Length 254;

Best Local Similarity 97.8%; Pred. No. 1.9e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46

|||||

DB 169 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 214

RESULT 11

S37137

Prion protein - greater kudu

C/Species: Tragelaphus strepericeus (greater kudu)

C/Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004

C/Accession: S37137

R/Martin, T.C.; Hughes, S.L.; Hughes, K.V.; Dawson, M.

submitted to the EMBL Data Library, August 1993

A/Reference number: S37137
 A/Status: Preliminary
 A/Molecule type: DNA
 A/Residues: 1-264 <MAR>

A/Cross-references: UNIPROT:P40242; EMBL:X74771; NID:G398937; PIDN:CAA52781.1; PID:G39893
 C/Suprafamily: major prion protein

Query Match 99.2%; Score 242; DB 2; Length 264;
 Best Local Similarity 95.7%; Pred. No. 2.7e-22;
 Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46
 |||||
 DB 181 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 226

RESULT 12

S71041

Major prion protein - black-handed spider monkey (fragment)

C/Species: Ateles geoffroyi (black-handed spider monkey)

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71041; S53630

R/Schatz, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-232 <SCH>

A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AA50097.1; PID:G47437

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53630

A/Molecule type: DNA

A/Residues: 1-194, 'R', 196-231 <SCW>

A/Cross-references: EMBL:U08309

C/Suprafamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.8%; Score 241; DB 2; Length 232;

Best Local Similarity 97.8%; Pred. No. 3.1e-22;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46

|||||

DB 154 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 199

RESULT 13

B34759

Prion protein - golden hamster

C/Species: Mesocricetus auratus (golden hamster)

C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999

C/Accession: B34759

R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,

Mol. Cell. Biol. 10, 1153-1163, 1990

A/Title: Three hamster species with different scrapie incubation times and neuropathology

A/Reference number: A34759; MUID:90158578; PMID:2406562

A/Accession: B34759

A/Status: Preliminary

A/Molecule type: DNA

A/Residues: 1-254 <LOW>

A/Cross-references: GB:M33959; NID:G191182; PIDN:AAA37014.1; PID:G191183

C/Suprafamily: major prion protein

Query Match 98.4%; Score 240; DB 2; Length 254;

Best Local Similarity 95.7%; Pred. No. 4.5e-22;

Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTIKQHTVTTTGGNFETEDVMMERVVEQWCI 46

DB 170 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMCV 215

RESULT 14

A34759
prion protein - Chinese hamster
C:Species: Cricetus griseus (Chinese hamster)
C:Date: 13-Jul-1990 #sequence_rev1510 13-Jul-1990 #text_change 09-Jul-2004
C:Accession: A34759
R:Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J. Cell Biol. 10, 1153-1163, 1990
A:Title: Three hamster species with different scrapie incubation times and neuropathology
A:Reference number: A34759; MUID:90158578; PMID:2406562
A:Accession: A34759
A:Status: Preliminary
A:Molecule type: DNA
A:Residues: 1-254 <LOW>
A:Cross-references: UNIPROT:Q60506; GB:M33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C:Superfamily: major prion protein

Query Match

Best Local Similarity 98.4%; Score 240; DB 2; Length 254;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMC 46

DB 170 NNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMCV 215

RESULT 15

S53627
major prion protein - green monkey
C:Species: Cercopithecus aethiops (green monkey, grivet)
C:Date: 28-Oct-1996 #sequence_rev1510 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53627; S71043
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: UNIPROT:P40250; EMBL:U08291
R:Schaetzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 98.0%; Score 239; DB 2; Length 245;
Matches 45; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMC 46

DB 162 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMC 207

Search completed: December 3, 2004, 00:38:39
Job time : 13.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221
Sequence score: 244
Sequence: 1 SNQNNFVHDCVNTTKQHTV.....ENFTETDYKMERVVEQMKI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt_02: *
1: uniprot_sprot: *
2: uniprot_trembl: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	244	100.0	238	1	PRIO_CERAT
2	244	100.0	238	1	PRIO_THEGE
3	244	100.0	238	2	Q86XR1
4	244	100.0	241	1	PRIO_CALMO
5	244	100.0	241	1	PRIO_MANSP
6	244	100.0	245	1	PRIO_CERAE
7	244	100.0	246	1	PRIO_CERMO
8	244	100.0	246	1	PRIO_CERNE
9	244	100.0	246	1	PRIO_CERTO
10	244	100.0	246	1	PRIO_ERYPA
11	244	100.0	246	2	AA083636
12	244	100.0	252	1	PRIO_CERAP
13	244	100.0	253	1	PRIO_COLGU
14	244	100.0	253	1	PRIO_GORGO
15	244	100.0	253	1	PRIO_HUMAN
16	244	100.0	253	1	PRIO_MACEA
17	244	100.0	253	1	PRIO_PONPY
18	244	100.0	253	1	PRIO_PREFR
19	244	100.0	253	2	Q6FG88
20	244	100.0	253	2	Q6JL99
21	244	100.0	253	2	AA880162
22	244	100.0	253	2	AA812192
23	244	100.0	277	2	Q6SE81
24	244	100.0	277	2	AA821603
25	244	100.0	285	2	Q7S942
26	243	99.6	253	2	Q866V6
27	243	99.6	253	2	Q920T5
28	243	99.6	254	1	PRIO_MOUSE
29	243	99.6	254	1	PRIO_RAT
30	243	99.6	254	1	Q8VHT6
31	243	99.6	254	2	AA819993

32	243	99.6	260	1	PRIO_SAISC	P40258 saimiri sci
33	242	99.2	220	2	Q866W7	Q866W7 ochotona pr
34	242	99.2	226	2	Q97907	Q97907 gazella sub
35	242	99.2	227	2	Q97909	Q97909 tragelaphus
36	242	99.2	256	1	PRP2_TRAST	P40243 tragelaphus
37	242	99.2	264	1	PRP1_TRAST	P40242 tragelaphus
38	241	98.8	232	1	PRIO_ATEGS	P40246 ateles geot
39	241	98.8	252	1	PRIO_CALJA	P40247 callithrix
40	240	98.4	239	1	PRIO_AOTTR	P40245 aotus trivi
41	240	98.4	240	2	Q8VHT4	Q8vht4 microtus ag
42	240	98.4	248	2	Q8VHT5	Q8vht5 clethrionom
43	240	98.4	254	1	PRIO_CRIGR	Q60506 cricetus
44	240	98.4	254	1	PRIO_CRIMI	Q60468 cricetus
45	240	98.4	254	1	PRIO_SIGHI	Q920C3 sigmodon hi

ALIGNMENTS

RESULT 1
PRIO_CERAT STANDARD; PRT; 238 AA.
ID PRIO_CERAT
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=Prp;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
RX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion".
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL: U75384; AAB50623.1; -;
CC EMBL: U75382; AAB50623.1; -;
CC HSSP: P23907; IG04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prion octapep; 5.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER <1 15 By similarity.
FT SIGNAL <1 15 Major prion protein.
FT CHAIN 16 215

```

FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 76 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 53 52 0.
FT REPEAT 44 52 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3E351B CRC64;

Query Match 100.0%; Score 244; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 155 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 200

RESULT 2
PRT: 238 AA.
ID PRT: 238 AA.
AC 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP; Synonyms=PRP;
OS Therophilus gelada (Gelada baboon).
OC Mammalia; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Butleria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Therophilus.
OC NCBI_TaxID=9565;
(1)
RN SEQUENCE FROM N.A.
RP van der Kuyl A.C., Dekker J.T., Gouda M.J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rod".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL: U75383; AAB50630.1; -.
CC HSRP: P23907; IGO4.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00397; Prion.1.
CC Pfam: PF03991; Prion octapep; 5.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein, GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.

```

```

FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 >238 Removed in mature form (By similarity).
FT DISULFID 164 199 By similarity.
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT CARBOHYD 166 166 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT NON_TER 238 238 4.
SQ SEQUENCE 238 AA; 26104 MW; 5F59BF60243EDB CRC64;

Query Match 100.0%; Score 244; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 155 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 200

RESULT 3
PRT: 238 AA.
ID PRELIMINARY;
AC 086XRI;
DT 01-JUN-2003 (TREMBLrel. 24, Created)
DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Butleria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
(1)
RN SEQUENCE FROM N.A.
RP Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
CC EMBL: AY19882; AA083635.1; -.
CC InterPro: IPR000817; Prion.
CC Pfam: PF03991; Prion octapep; 5.
CC PRINTS: PR00341; PRION.
CC SMART: SM00157; PRP.1.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Prion.
FT NON_TER 1 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match 100.0%; Score 244; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
Db 155 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 200

RESULT 4
PRT: 241 AA.
ID PRT: 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)

```

DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Callicebus moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
OC Callicebus;
OK NCBI_Taxid=9523;
RN (1)
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: U08312; AAC50100.1; -;
DR PIR: S71048; S71048.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT FT NON TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 >241
FT DISULFID 172 207
FT LIPID 223 223
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT NON TER 241 241
SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;
Query Match 100.0%; Score 244; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PRIO MANSP
ID PRIO MANSP STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Mandrillus sphinx (Mandrill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Mandrillus.
OK NCBI_Taxid=9561;
RN (1)
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: U08303; AAC50091.1; -;
DR PIR: S71056; S71056.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT FT NON TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 >241
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT NON TER 241 241
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B2B59DE CRC64;
Query Match 100.0%; Score 244; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 1.5e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 163 SNONNFVHDCVNTTIKQHTVTTTIGKSNFTETDVKKMERVVEQWCI 208

```

RESULT 6
PRIO_CERAE STANDARD; PRT; 245 AA.
ID PRIO_CERAE
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PrNP;
OS Cercopithecus aethiops (Green monkey) (Givet), and
OC Cercopithecus diana (Diana monkey)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC -----
DR EMBL; U08291; AAC50080.1; -
DR EMBL; U08292; AAC50081.1; -
DR PIR; S53627; S53627.
DR PIR; S71045; S71045.
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 222
FT PROPEP 223 245
FT LIPID 222 222
FT DISULFID 171 206
FT CARBOHYD 173 173
FT CARBOHYD 189 189
FT DOMAIN 51 83
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT SEQUENCE 245 AA; 26865 MW; D582B58E2726C99A CRC64;

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Query Match 100.0%; Score 244; DB 1; Length 245;
 Basic Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNONNFVHDCVNTTIKQHTVTTTIGKSNFTETDVKKMERVVEQWCI 46
 Db 162 SNONNFVHDCVNTTIKQHTVTTTIGKSNFTETDVKKMERVVEQWCI 207

```

RESULT 7
PRIO_CERMO STANDARD; PRT; 246 AA.
ID PRIO_CERMO
AC P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RX van der Kuyt A.C., Dekker J.T., Goudamit J.;
RA "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U75386; AAB50625.1; -
DR HSSP; P23907; IG04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT SEQUENCE 245 AA; 26865 MW; D582B58E2726C99A CRC64;

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FT REPEAT 77 84 5.
 SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC1 46
 Db 163 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC1 208

RESULT 8
 PRT; 246 AA.
 ID PRT; 246 AA.
 AC PRT; 246 AA.
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Cercopithecus neglectus (De Brazza's monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NC NCBI_TaxID=36227;
 RN NCBI_TaxID=36227;
 RP SEQUENCE FROM N.A.
 RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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 CC or send an email to license@isb-sib.ch.
 CC EMBL; U75387; AAB50628.1; --
 CC HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 1.

FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC1 46
 Db 163 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMC1 208

RESULT 9
 PRT; 246 AA.
 ID PRT; 246 AA.
 AC PRT; 246 AA.
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NC NCBI_TaxID=9531;
 RN NCBI_TaxID=9531;
 RP SEQUENCE FROM N.A.
 RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "ronds".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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 CC or send an email to license@isb-sib.ch.
 CC EMBL; U75385; AAB50628.1; --
 CC HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT REPEAT 44 52
 FT REPEAT 1.

FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 SQ SEQUENCE 246 AA; 26914 MW; P58679CBBC5ADC7 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVVKMERVVEQWCI 46
 DB 163 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVVKMERVVEQWCI 208

FT DISULFID 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT REPEAT 77 84 4.
 SQ SEQUENCE 246 AA; 26886 MW; D35D105BBC53108 CRC64;
 Query Match 100.0%; Score 244; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVVKMERVVEQWCI 46
 DB 163 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVVKMERVVEQWCI 208

RESULT 10
 PRIO_ERYPA STANDARD; PRT; 246 AA.
 AC Q95174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C) (Fragment).
 GN Name=Prnp;
 OS Erythrocytus patus (Red guenon) (Cercopithecus patus).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Erythrocytus.
 NC NCB1_Taxid=9538;
 [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; U75388; AAB50627.1; -;
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PR00377; Prion.1.
 DR Pfam; PR00391; Prion.2.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 15
 FT CHAIN 16 223 By similarity.
 FT PROPEP 224 246 Major prion protein.
 FT LIPID 223 223 Removed in mature form (By similarity).
 FT GPI-anchor amidated serine (By similarity).

RESULT 11
 AA083636 PRELIMINARY; PRT; 246 AA.
 AC AA083636;
 DT 02-MAR-2004 (TrEMBLrel. 27, Created)
 DT 02-MAR-2004 (TrEMBLrel. 27, Last sequence update)
 DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NC NCB1_Taxid=9606;
 [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY29883; AA083636.1; -;
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 SQ SEQUENCE 246 AA; 26884 MW; 30981B13C8841566 CRC64;
 Query Match 100.0%; Score 244; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 1.5e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVVKMERVVEQWCI 46
 DB 163 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVVKMERVVEQWCI 208

RESULT 12
 PRIO_CEBAP STANDARD; PRT; 252 AA.
 AC P40249;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (PpP33-35C).
 GN Name=Prnp;
 OS Cebus apella (Brown-capped capuchin).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.
 NC NCB1_Taxid=9515;
 [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.B., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).

```

CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISBASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL: U08295; AAC50084.1; -.
CC PIR: S53631; S53631.
CC HSSP: P23907; 1G04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC CHAIN 23 229
CC PROPEP 230 252
CC LIPID 229 229
CC -----
CC DISUFID 178 213
CC CARBOHYD 180 186
CC CARBOHYD 196 196
CC DOMAIN 51 90
CC -----
CC REPEAT 51 58
CC REPEAT 59 66
CC REPEAT 67 74
CC REPEAT 75 82
CC REPEAT 83 90
CC -----
CC SEQUENCE 252 AA; 27579 MW; A2DFCA0AD26D7821 CRC64;
CC -----
Query Match 100.0%; Score 244; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 1,6e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374 (1995).
RN (2)
RP SEQUENCE OF 8-253 FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudemil J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISBASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
CC EMBL: U08297; AAC50086.1; -.
CC EMBL: U75389; AAB50624.1; -.
CC PIR: S53618; S53618.
CC HSSP: P23907; 1G04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION.
CC PROSITE: PS00706; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC SIGNAL 1 22
CC CHAIN 23 230
CC PROPEP 231 253
CC LIPID 230 230
CC -----
CC DISUFID 179 214
CC CARBOHYD 181 181
CC CARBOHYD 197 197
CC DOMAIN 51 91
CC -----
CC REPEAT 51 59
CC REPEAT 60 67
CC REPEAT 68 75
CC REPEAT 76 83
CC REPEAT 84 91
CC -----
CC SEQUENCE 253 AA; 27626 MW; 14B17477881F5316 CRC64;
CC -----
Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1,6e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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2 / 0 5N9NNF VHDVCVNIJIKQHTVTITTKGENFTETDVKMERVEQMCI 215

AC P04156; 060489: P78446: 015316; 015331
STANDARD; PRT; 253 AA.

01-NOV-1986 (Rel. 03, Last sec
01-OCT-2004 (Rel. 45, Last sec

DE (CD230 antigen) . (FIR2/-30) (PIPP3-35C) (ASCR)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Primates (human);

BP SENTENCE FROM " ,
[1]
KN

RA Kretzschmar H.A., Stowring L.E., Westaway D., Stubbhøjehne W H

RL Molecular cloning of a human prion protein cDNA. " DNA 5:315-324 (1986).

```

T1SS0E=Brain;
MEDTINE=91328137. Pubv=1 1550000

```

"Genomic structure of the human prion protein gene

SEQUENCE FROM N.A.

Achnafya C., Ankener M., Baskin D., Cooper C., Yao H
Hood J. E.

region from three mammalian species."

P SEQUENCE FROM N.A.

"Cloning of human prostate cancer cells"

[5] *Journal of Statistical Software*, 2004, 12:1-13.

Deloukas P., Matthews L.H., Ashurst J.L., Burton I.

Buck B., Burrill W. D., Putnam A. M., Beasley O. E., Bird C. P., Blakey S. E., Bridgeman A. M.

Clegg S., Cobley V.E., Collier R.E., Connor R.E., Co

Grafham D.V., Griffiths C., Griffiths M.N.D., French L.

nuckie E., Hunt A.R., Hunt S.E., Jekovich K., Johnson
Kay M.P., Kimberley A.M., King R.L., Kline D.B.,
Kobayashi T., Kohnen S., Kopp G., Kopp W., Kopp W.,

Marsh V.L., Martin S.L., McConnachie L.J., McIlroy K., Milne S.A., Wilson J.

Phillimore B.J.C.T., Prathalingam S.B., Plumb R W

RA Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
 RA Swann R.M., Symamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
 RA Tracey A., Tromans A.C., Vaudin M., Walli M., Wallis J.M.,
 RA Whitehead S.L., Whiteaker P., Willey D.L., Williams L., Williams S.A.,
 RA Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
 RA Rogers J.,
 RT "The DNA sequence and comparative analysis of human chromosome 20.";
 RL Nature 414:865-871(2001).
 [16]
 RP SEQUENCE FROM N.A.
 RP TISSUE=Brain, AND Ovary;
 RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hale F.,
 RA Datchenko L., Marinska K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Udén T.B., Toshiyuki S., Cantinici P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullany S.J.,
 RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Rahney J., Helton E., Kettelman M., Madan A., Rodriques S., Sanchez A.,
 RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallus D.E.,
 RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
 RT "Generation and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 [17]
 RP SEQUENCE OF 8-253 FROM N.A.
 RX MEDLINE=86261778; PubMed=3014653;
 RA Liao Y.-C.J., Lebo R.V., Clawson G.A., Smuckler E.A.;
 RT "Human prion protein cDNA: molecular cloning, chromosomal mapping, and
 RT biological implications.";
 RL Science 233:364-367(1986).
 [18]
 RP SEQUENCE OF 9-232 FROM N.A., AND VARIANT 56-GLY-63 DEL.
 RC TISSUE=Brain;
 RX MEDLINE=93250789; PubMed=1363802;
 RA Diedrich J.F., Knopman D.S., List J.F., Olson K., Frey W.H.,
 RA Emery C.R., Sung J.H., Haase A.T.;
 RT "Deletion in the prion protein gene in a demented patient.";
 RL Hum. Mol. Genet. 1:443-444(1992).
 [19]
 RP SEQUENCE OF 41-85 FROM N.A., AND VARIANT 56-GLY-63 DEL.
 RX MEDLINE=96090306; PubMed=7485229;
 RA Perry R.T., Go R.C., Harrell L.E., Acton R.T.;
 RT "SSCP analysis and sequencing of the human prion protein gene (PRNP)
 RT detects two different 24 bp deletions in an atypical Alzheimer's
 RT disease family.";
 RL Am. J. Med. Genet. 60:12-18(1995).
 [10]
 RP SEQUENCE OF 58-85 AND 111-150.
 RX MEDLINE=91160504; PubMed=1672107;
 RA Tagliavini F., Prelli F., Ghiso J., Bugiani O., Serban D.,
 RA Prusiner S.B., Farlow M.R., Ghetti B., Frangione B.;
 RT "Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana
 RT kindred) is an 11 kd fragment of prion protein with an N-terminal
 RT glycine at codon 58.";
 RL EMBO J. 10:513-519(1991).
 [11]
 RP SEQUENCE OF 84-91 FROM N.A.
 RX MEDLINE=92073400; PubMed=1683708;
 RA Goldfarb L.G., Brown P., McCombie W.R., Goldgaber D., Swergold G.D.,
 RA Wills P.R., Cervenkova L., Baron H., Gibbs C.J. Jr., Gajdusek D.C.;
 RT "Transmissible familial Creutzfeldt-Jakob disease associated with
 RT five, seven, and eight extra octapeptide coding repeats in the PRNP
 RT gene.";
 RL Proc. Natl. Acad. Sci. U.S.A. 88:10926-10930(1991).

RN [12]
 RP STRUCTURE BY NMR OF 23-230.
 RX MEDLINE=20087216; PubMed=10618385;
 RA Zahn R., Liu A., Luhrs T., Riek R., von Schroetter C.,
 RA Lopez Garcia F., Billeter M., Calzolari L., Wider G., Wuthrich K.;
 RT "NMR solution structure of the human prion protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:145-150(2000).
 [13]
 RP STRUCTURE BY NMR OF 118-221.
 RX MEDLINE=20359708; PubMed=10900000;
 RA Calzolari L., Lysek D.A., Guntert P., von Schroetter C., Riek R.,
 RA Zahn R., Wuthrich K.;
 RT "NMR structures of three single-residue variants of the human prion
 RT protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).
 [14]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=93372867; PubMed=8364585;
 RA Palmer M.S., Collinge J.;
 RT "Mutations and polymorphisms in the prion protein gene.";
 RL Hum. Mutat. 2:168-173(1993).
 [15]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=94029646; PubMed=8105771;
 RA Prusiner S.B.;
 RT "Genetic and infectious prion diseases.";
 RL Arch. Neurol. 50:1129-1153(1993).
 [16]
 RP VARIANT GSD LEU-102.
 RX MEDLINE=89159432; PubMed=2564168;
 RA Hsiao K., Baker H.F., Crow T.J., Poulter M., Owen F.,
 RA Terrylliger J.D., Westaway D., Ott J., Prusiner S.B.;
 RT "Linkage of a prion protein missense variant to Gerstmann-Strausler
 RT syndrome.";
 RL Nature 338:342-345(1989).
 [17]
 RP VARIANTS LEU-102; VAL-117 AND VAL-129.
 RX MEDLINE=89392018; PubMed=2783132;
 RA Doh-Ura K., Tateishi J., Saeki H., Kitamoto T., Sakaki Y.;
 RT "Pro-->Leu change at position 102 of prion protein is the most common
 RT but not the sole mutation related to Gerstmann-Strausler syndrome.";
 RL Biochem. Biophys. Res. Commun. 163:974-979(1989).
 [18]
 RP VARIANT PFI ASN-178.
 RX MEDLINE=92195483; PubMed=1347910;
 RA Medori R., Montagna P., Tritschler H.J., Leblanc A., Cortelli P.,
 RA Tinuper P., Lugaresi B., Gambetti P.;
 RT "Fatal familial insomnia: a second kindred with mutation of prion
 RT protein gene at codon 178.";
 RL Neurology 42:669-670(1992).
 [19]
 RP VARIANT CJD ASN-178.
 RX MEDLINE=91124933; PubMed=1671440;
 RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Kovanen J.,
 RA McCombie W.R., Trapp S., Gajdusek D.C.;
 RT "New mutation in scrapie amyloid precursor gene (at codon 178) in
 RT Finnish Creutzfeldt-Jakob kindred.";
 RL Lancet 337:425-425(1991).
 [20]
 RP VARIANT CJD LYS-200.
 RX MEDLINE=90355709; PubMed=1975028;
 RA Goldfarb L., Miltova E., Brown P., Toh B.K., Gajdusek D.C.;
 RT "Mutation in codon 200 of scrapie amyloid protein gene in two clusters
 RT

Query Match 100.0%; Score 244; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1,6e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 Db 170 SNQNNFVHDCVNITIKQHTVTTTGGNPFETDYKMMERVVEQNCI 215

Fri Dec 3 10:53:51 2004

us-10-031-975-12_copy_176_221.rup

Page 10

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Job time : 74.3541 sec8

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OM protein - protein search, using sw model

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(Without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221

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Gapop 10.0 , Gapext 0.5

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Total number of hits satisfying chosen parameters: 478139

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Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match length	ID	Description
1	244	100.0	142 1 US-08-556-823-10	Sequence 10, Appl
2	244	100.0	245 4 US-09-431-887-5	Sequence 5, Appl
3	244	100.0	245 4 US-09-431-887-15	Sequence 15, Appl
4	244	100.0	252 4 US-09-431-887-17	Sequence 17, Appl
5	244	100.0	253 1 US-08-242-188-2	Sequence 2, Appl
6	244	100.0	253 1 US-08-509-261A-2	Sequence 2, Appl
7	244	100.0	253 1 US-08-660-626-8	Sequence 8, Appl
8	244	100.0	253 1 US-08-692-852-2	Sequence 2, Appl
9	244	100.0	253 2 US-08-713-939A-2	Sequence 2, Appl
10	244	100.0	253 2 US-08-868-162A-22	Sequence 22, Appl
11	244	100.0	253 3 US-09-031-168-8	Sequence 8, Appl
12	244	100.0	253 3 US-09-128-450-20	Sequence 20, Appl
13	244	100.0	253 3 US-09-036-579-2	Sequence 2, Appl
14	244	100.0	253 3 US-09-823-494-20	Sequence 20, Appl
15	244	100.0	253 3 US-09-550-374-2	Sequence 1, Appl
16	244	100.0	253 4 US-09-431-887-1	Sequence 1, Appl
17	244	100.0	253 4 US-09-431-887-3	Sequence 3, Appl
18	244	100.0	253 4 US-09-431-887-4	Sequence 4, Appl
19	244	100.0	253 4 US-09-431-887-7	Sequence 7, Appl
20	244	100.0	253 4 US-09-431-887-9	Sequence 9, Appl
21	244	100.0	253 4 US-09-431-887-10	Sequence 10, Appl
22	244	100.0	253 4 US-09-431-887-11	Sequence 11, Appl
23	244	100.0	253 4 US-09-431-887-12	Sequence 12, Appl
24	244	100.0	253 4 US-09-431-887-14	Sequence 14, Appl
25	244	100.0	253 4 US-09-431-887-15	Sequence 15, Appl
26	244	100.0	253 4 US-09-431-887-18	Sequence 18, Appl
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28	244	100.0	253 4 US-09-669-516C-8	Sequence 8, Appl
29	244	100.0	253 4 US-09-919-172-57	Sequence 57, Appl
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34	243	99.6	254 1 US-08-660-626-7	Sequence 7, Appl
35	243	99.6	254 1 US-08-692-892-1	Sequence 1, Appl
36	243	99.6	254 2 US-08-713-939A-1	Sequence 1, Appl
37	243	99.6	254 2 US-08-868-162A-21	Sequence 21, Appl
38	243	99.6	254 3 US-09-031-168-7	Sequence 7, Appl
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45	243	99.6	254 4 US-09-431-887-20	Sequence 20, Appl

ALIGNMENTS

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RESULT 1
US-08-556-823-10
; Sequence 10, Application US/08556823
; Patent No. 5750361
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Kiyotoshi Kaneko
; APPLICANT: Fred E. Cohen
; TITLE OF INVENTION: Formation and use of prion protein
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Ascii
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valeta Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10

Query Match 100.0%; Score 244; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 6,1e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Cy 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMC1 46
Db 81 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMC1 126
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RESULT 2

US-09-431-887-5
 ; Sequence 5, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patent In Ver. 2.0
 ; SEQ ID NO 5
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus aethiops
 US-09-431-887-5

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 3

US-09-431-887-15
 ; Sequence 15, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: Patent In Ver. 2.0
 ; SEQ ID NO 15
 ; LENGTH: 245
 ; TYPE: PRT
 ; ORGANISM: Cercopithecus diana
 US-09-431-887-15

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 245;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 207

RESULT 4

US-09-431-887-17
 ; Sequence 17, Application US/09431887
 ; Patent No. 6534036
 ; GENERAL INFORMATION:
 ; APPLICANT: D-gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04

; NUMBER OF SEQ ID NOS: 37

; SOFTWARE: Patent In Ver. 2.0

; SEQ ID NO 17

; LENGTH: 252

; TYPE: PRT

; ORGANISM: Cebus sp.

US-09-431-887-17

Query Match

Best Local Similarity 100.0%; Score 244; DB 4; Length 252;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 5

US-08-242-188-2
 ; Sequence 2, Application US/08242188
 ; Patent No. 5565186
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Karl Bosicovic
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/242,188
 ; FILING DATE: 13-MAY-1994
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bosicovic, Karl
 ; REGISTRATION NUMBER: 28,807
 ; REFERENCE/DOCKET NUMBER: 06510/014001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 854-5277
 ; TELEFAX: (415) 854-0875
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 253 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; ORIGINAL SOURCE:
 ; ORGANISM: HUMAN PRION PROTEIN, HuPrP
 US-08-242-188-2

Query Match

Best Local Similarity 100.0%; Score 244; DB 1; Length 253;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 215

RESULT 6

US-08-242-188-2
 ; Sequence 2, Application US/08242188
 ; Patent No. 5565186
 ; GENERAL INFORMATION:
 ; APPLICANT: Prusiner, Stanley B.
 ; APPLICANT: Scott, Michael R.
 ; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
 ; NUMBER OF SEQUENCES: 4
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Karl Bosicovic
 ; STREET: 2200 Sand Hill Road
 ; CITY: Menlo Park
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94025
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent In Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/242,188
 ; FILING DATE: 13-MAY-1994
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Bosicovic, Karl
 ; REGISTRATION NUMBER: 28,807
 ; REFERENCE/DOCKET NUMBER: 06510/014001
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 854-5277
 ; TELEFAX: (415) 854-0875
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 253 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; ORIGINAL SOURCE:
 ; ORGANISM: HUMAN PRION PROTEIN, HuPrP
 US-08-242-188-2

Query Match

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 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 46

DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQWCI 215

US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
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TOPOLOGY: linear
US-08-509-261A-2
Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 170 SNONNFVHDCVNTTKQHTVTTTGGNFTEIDVKKMERVVEQWCI 215
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US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EGYPTIAN-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Acclii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-660-626-8
Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Cy 1 SNONNFVHDCVNTTKQHTVTTTGGNFTEIDVKKMERVVEQWCI 46
Db 170 SNONNFVHDCVNTTKQHTVTTTGGNFTEIDVKKMERVVEQWCI 215
RESULT 8
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 244; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVMMERVVEQNCI 46
Db 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVMMERVVEQNCI 215

RESULT 9

US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713, 939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:

INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVMMERVVEQNCI 46
Db 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVMMERVVEQNCI 215

RESULT 10

US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868, 162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:

INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 244; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVMMERVVEQNCI 46
Db 170 SNQNNFVHDCVNTTKQHTVTTTGGNFETETDVMMERVVEQNCI 215

RESULT 11

US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583

GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

```

CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match          100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQNCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQNCI 215

RESULT 12
US-09-128-450-20
Sequence 20, Application US/09128450
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match          100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQNCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQNCI 215
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RESULT 13
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match          100.0%; Score 244; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQNCI 46
DB 170 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMMERVVEQNCI 215

RESULT 14
US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 635610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
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SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 20
 LENGTH: 253
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-823-494-20

Query Match 100.0%; Score 244; DB 3; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.2e-25;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKKMERVVEQWCI 46
 Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKKMERVVEQWCI 215

RESULT 15

US-09-550-374-2
 Sequence 2, Application US/09550374
 Patent No. 6372214

GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Williamson, R. Anthony
 APPLICANT: Burton, Dennis R.
 TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
 NUMBER OF SEQUENCES: 86
 CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.
 STREET: 2200 Sand Hill Road
 CITY: Menlo Park
 STATE: CA
 COUNTRY: U.S.A.
 ZIP: 94025

COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastSeq Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/550,374
 FILING DATE:

CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 09/036,579
 FILING DATE:

ATTORNEY/AGENT INFORMATION:
 NAME: Bozicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 06510/059001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-854-5277
 TELEFAX: 415-854-0875

TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-09-550-374-2

Query Match 100.0%; Score 244; DB 3; Length 253;
 Best Local Similarity 100.0%; Pred. No. 1.2e-25;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKKMERVVEQWCI 46
 Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNTFTDVKKMERVVEQWCI 215

Search completed: December 3, 2004, 00:18:56
 Job time: 17.4197 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(Without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-12_COPY_176_221

Perfect score: 244
Sequence: 1 SNONFVHDCVITIKQHTV.....ENFTEDVKMERVWQKCI 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seque, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

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2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
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20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
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7	244	100.0	117	14	US-10-050-902-348
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9	244	100.0	117	14	US-10-050-902-348
10	244	100.0	117	14	US-10-050-902-348
11	244	100.0	117	14	US-10-050-902-348
12	244	100.0	117	14	US-10-050-902-348
13	244	100.0	117	14	US-10-050-902-348

14	244	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
15	244	100.0	253	9	US-09-919-172-57	Sequence 57, Appl1
16	244	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
17	244	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
18	244	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
19	244	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
20	244	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
21	244	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
22	244	100.0	253	14	US-10-304-630-10	Sequence 10, Appl1
23	244	100.0	253	14	US-10-304-630-11	Sequence 11, Appl1
24	244	100.0	253	14	US-10-304-630-12	Sequence 12, Appl1
25	244	100.0	253	14	US-10-304-630-14	Sequence 14, Appl1
26	244	100.0	253	14	US-10-304-630-16	Sequence 16, Appl1
27	244	100.0	253	14	US-10-304-630-18	Sequence 18, Appl1
28	244	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl1
29	244	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl1
30	244	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl1
31	244	100.0	253	14	US-10-301-488A-8	Sequence 8, Appl1
32	244	100.0	253	14	US-10-346-190-79	Sequence 79, Appl1
33	244	100.0	253	14	US-10-435-602-2	Sequence 2, Appl1
34	244	100.0	253	15	US-10-301-448-21	Sequence 21, Appl1
35	244	100.0	253	15	US-10-301-448-22	Sequence 22, Appl1
36	244	100.0	253	15	US-10-301-448-32	Sequence 32, Appl1
37	244	100.0	253	16	US-10-648-593-151	Sequence 151, Appl1
38	244	100.0	253	16	US-10-470-848-2	Sequence 2, Appl1
39	244	100.0	253	16	US-10-772-656-54	Sequence 54, Appl1
40	244	100.0	592	17	US-10-745-393-3	Sequence 3, Appl1
41	243	99.6	124	14	US-10-050-902-324	Sequence 324, Appl1
42	243	99.6	124	14	US-10-050-898-324	Sequence 324, Appl1
43	243	99.6	124	14	US-10-346-190-93	Sequence 93, Appl1
44	243	99.6	164	9	US-09-745-003-12	Sequence 12, Appl1
45	243	99.6	209	16	US-10-470-848-6	Sequence 6, Appl1

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
GENERAL INFORMATION:
Publication No. US20030175290A1
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisbec, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Ploesek, Christine
TITLE OR INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 49 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tiesse, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Ploesek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 49 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Peiliclioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 244; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 49 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 94

RESULT 4

US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lubers, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUB-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 244; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.1e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 46
DB 81 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQWCI 126

RESULT 5

US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: FRP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 244; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.2e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 79 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 124

RESULT 6
US-10-104-047-2013
; Sequence 2013, Application US/10104047
; Publication No. US20030236392A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: NO. US20030236392A1 full length cDNA
; FILE REFERENCE: H1-A0105
; CURRENT APPLICATION NUMBER: US/10/104,047
; CURRENT FILING DATE: 2002-03-25
; PRIOR APPLICATION NUMBER:
; PRIOR FILING DATE:
; NUMBER OF SEQ ID NOS: 4096
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2013
; LENGTH: 163
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 244; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 7.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 80 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 125

RESULT 7
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 244; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 9.3e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 140 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 185

RESULT 8
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848

; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 244; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9.8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 193

RESULT 9
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Faatz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Schaarschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
; TITLE OF INVENTION: chaperone, and method for producing and using them
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 01115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-11
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 244; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9.8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 46
Db 148 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQNCI 193

RESULT 10
US-10-304-630-5
; Sequence 5, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

;; PRIOR FILING DATE: 1999-11-04
;; NUMBER OF SEQ ID NOS: 37
;; SOFTWARE: PatentIn Ver. 2.0
;; SEQ ID NO 5
;; LENGTH: 245
;; TYPE: PRT
;; ORGANISM: Cercopithecus aethiops
US-10-304-630-5

Query Match 100.0%; Score 244; DB 14; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 46
DB 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 207

RESULT 11
US-10-304-630-15
; Sequence 15, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-10-304-630-15

Query Match 100.0%; Score 244; DB 14; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 46
DB 162 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 207

RESULT 12
US-10-304-630-17
; Sequence 17, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-10-304-630-17

Query Match 100.0%; Score 244; DB 14; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 46
DB 169 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 214

RESULT 13
US-09-823-494-20
; Sequence 20, Application US/09823494
; Publication No. US20010041790A1
; GENERAL INFORMATION:
; APPLICANT: Chesebrough, Bruce W
; APPLICANT: Chesebrough, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; PRIOR FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 244; DB 9; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 46
DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 215

RESULT 14
US-09-904-987-3
; Sequence 3, Application US/09904987
; Patent No. US20020037908A1
; GENERAL INFORMATION:
; APPLICANT: No. US20020037908A1acy1, Inc.
; TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prepathic
; FILE REFERENCE: 42108/26146
; CURRENT APPLICATION NUMBER: US/09/904,987
; PRIOR FILING DATE: 2001-07-12
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 3
; LENGTH: 253
; TYPE: PRT
; ORGANISM: homo sapiens
; PUBLICATION INFORMATION:
; DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM_009567
; DATABASE ENTRY DATE: 2001-04-17
; RELEVANT RESIDUES: (1)..(253)
US-09-904-987-3

Query Match 100.0%; Score 244; DB 9; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 46
DB 170 SNONNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQMCI 215

```

RESULT 15
US-09-919-172-57
; Sequence 57, Application US/09919172
; Patent No. US20020119463A1
; GENERAL INFORMATION:
; APPLICANT: Faris, Mary
; APPLICANT: Turner, Christopher M.
; TITLE OF INVENTION: PROSTATE CANCER MARKERS
; FILE REFERENCE: PA-0036 US
; CURRENT APPLICATION NUMBER: US/09/919,172
; CURRENT FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/222,469
; PRIOR FILING DATE: 2000-07-28
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PERL Program
; SEQ ID NO 57
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20020119463A1 1256895CD1
US-09-919-172-57

Query Match 100.0%; Score 244; DB 9; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQWCI 46
   |||||||
Db 170 SNQNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQWCI 215

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OM protein - protein search, using sw model

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(without alignments)
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Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNFDHCVNITIKQHTVTTTGTGENTETDVKMER 36

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Gapop 10.0 , Gapext 0.5

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Total number of hits satisfying chosen parameters: 2002273

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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: geneseqp1990s:.*
3: geneseqp2000s:.*
4: geneseqp2001s:.*
5: geneseqp2002s:.*
6: geneseqp2003as:.*
7: geneseqp2003bs:.*
8: geneseqp2004s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	193	100.0	117	5	ABG94357 Modified
2	193	100.0	117	5	ABG80669 Human pri
3	193	100.0	117	7	ADD24196 Modified
4	193	100.0	124	5	ABG94340 Mouse mPr
5	193	100.0	124	5	ABG80652 Mouse tru
6	193	100.0	124	7	ADD24200 mPr-Pt-EK
7	193	100.0	142	7	AAW17686 Prion pro
8	193	100.0	163	7	ADB63859 Human pro
9	193	100.0	200	5	ABG31907 Human pri
10	193	100.0	208	3	AAW07316 Human pri
11	193	100.0	208	3	AAW07318 Human pri
12	193	100.0	208	3	AAW07327 Mouse pri
13	193	100.0	208	3	AAW07329 Human pri
14	193	100.0	208	5	ABG31902 Human pri
15	193	100.0	208	5	ABG31904 Chimera-t
16	193	100.0	208	7	ADJ66133 Mouse pri
17	193	100.0	209	4	ABG31905 HCV type
18	193	100.0	211	4	AAW30801 Amino aci
19	193	100.0	225	6	ABR42793 Rat prion
20	193	100.0	226	7	ADB85240 Rat prion
21	193	100.0	245	4	AAW72342 Monkey pr
22	193	100.0	245	4	AAW72352 Cercopit
23	193	100.0	253	2	AAW86715 Human pri
24	193	100.0	253	2	AAW69660 Human pri
25	193	100.0	253	2	AAW85501 Human pri

ALIGNMENTS

26	193	100.0	253	2	AAW07994 Human pri
27	193	100.0	253	3	AAW81485 Human pri
28	193	100.0	253	3	AAW06272 Human pri
29	193	100.0	253	3	AAW15035 Human pri
30	193	100.0	253	4	AAW72339 Chimpanze
31	193	100.0	253	4	AAW72347 Prion pro
32	193	100.0	253	4	AAW72353 Guereza p
33	193	100.0	253	4	AAW72344 Rhesus mo
34	193	100.0	253	4	AAW72345 Gibbon pr
35	193	100.0	253	4	AAW72350 Marmoset
36	193	100.0	253	4	AAW72351 Hamadryas
37	193	100.0	253	4	AAW72348 Prion pro
38	193	100.0	253	4	AAW72356 Stiamang p
39	193	100.0	253	4	AAW72346 Prion pro
40	193	100.0	253	4	AAW72355 Prion pro
41	193	100.0	253	4	AAW72349 Prion pro
42	193	100.0	253	4	AAW72340 Orangutan
43	193	100.0	253	4	AAW72338 Human pri
44	193	100.0	253	4	AAW72354 Capuchin
45	193	100.0	253	4	AAW72341 Gorilla p

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
DE Modified human prion protein fragment.
XX
KM Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002WO-1B000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-0331045P.
XX
(CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisost A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;
XX
DR WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX
PS This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organiser comprising
XX at least one first attachment site, where the organiser is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 SQ Sequence 117 AA;

Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMER 36
 DB 52 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMER 87

RESULT 2
 ABG80669
 ID ABG80669 standard; protein; 117 AA.
 AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)
 DE Human prion protein/cysteine-containing peptide fusion protein.
 XX
 KW Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mitean;
 KW graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative disease lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.
 XX
 OS Homo sapiens.
 OS Synthetic.
 PN WO200256907-A2.
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (INVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUBO/) LUBOEND R.
 PA (STAV/) STAUFENBIEL M.
 PA (FRRE/) FREY P.
 XX
 PI Maurer P., Lechner F., Ortman R., Luegend R., Staufenbiel M., Frey P.,

PI Renner WA, Bachmann M, Tiseot A, Sebbel P, Ploesek C;
 XX WPI; 2002-636514/68.
 DR
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 418; 418pp; English.

CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organism comprising at least one first attachment
 CC site, where the organism is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the scaffold through at least one non-peptide bond to the first attachment site; and
 CC occurring with the antigen or antigenic determinant, and where the second
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative disease lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified to
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

SQ Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMER 36
 DB 52 NNFVHDCVNTTKQHTVTTTGTGKGFETDVMQMER 87

RESULT 3
 ADD24196
 ID ADD24196 standard; protein; 117 AA.
 AC ADD24196;
 XX
 DT 15-JAN-2004 (first entry)
 DE Modified human prion protein amino acid sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mitein.
 XX
 OS Synthetic.
 OS prion.
 XX
 PN WO2003059386-A2.
 XX

PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003WO-EP000460.
 XX
 XX 18-JAN-2002; 2002US-00050902.
 XX 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 XX Disclosure; SEQ ID NO 89; 246pp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (Prp) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKQHTVTTTGGNFETDVKMER 36
 DB 52 NNFVHDCVNTTKQHTVTTTGGNFETDVKMER 87
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 XX 10-DEC-2002 (first entry)
 DT
 XX
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 PN MO20256905-A2.
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000166.
 PF
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 XX Renner WA, Bachmann M, Tlesoc A, Maurer P, Lechner F, Sebbel P;
 PI Ploesek C;
 XX
 XX WPI; 2002-627351/67.
 DR
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PT
 XX
 XX Disclosure; Page 438; 441pp; English.
 XX
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capid which comprises mutant Q β eta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNTTKQHTVTTTGGNFETDVKMER 36
 DB 53 NNFVHDCVNTTKQHTVTTTGGNFETDVKMER 88
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 XX 29-NOV-2002 (first entry)
 DT
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β eta 1-42; influenza; muten;
 KM graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angiotensinoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 OS Synthetic.
 OS

BN MO200256907-A2.
 XX 25-JUL-2002.
 XX 21-JAN-2002; 2002WO-IB000168.
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBOEND R.
 PA (STAU) STAUFENBIEL M.
 PA (FREY) FREY P.
 XX Maurer P, Lechner F, Ortmann R, Lueoend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tisot A, Sebbel P, Ploesek C;
 XX MPI; 2002-636514/68.
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX Example 7; Page 415; 418pp; English.
 XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (11) an antigen or antigenic determinant with at least
 CC one covalent bond, (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (11) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the scaffold; and
 CC where the antigen or antigenic determinant and the first attachment site;
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).
 XX Sequence 124 AA;
 SQ
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 XX ADD24200;
 XX 15-JAN-2004 (first entry)
 XX mPrP-EK-Fc* cleaved protein sequence.
 DE
 XX vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.
 XX
 OS unidentified.
 OS prion.
 XX WO2003059386-A2.
 PN
 XX 24-JUL-2003.
 PD
 XX 17-JAN-2003; 2003WO-EP000460.
 PF
 XX 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 PI MPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX Example 13; SEQ ID NO 93; 246pp; English.
 PS
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX Sequence 124 AA;
 SQ
 Query Match 100.0%; Score 193; DB 7; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 7
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 XX AAM17686;
 XX

DT 14-JUN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KW Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KW Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX Homo sapiens.
 XX MO9716728-A1.
 PN 09-MAY-1997.
 XX 28-OCT-1996; 96MO-US017462.
 XX 02-NOV-1995; 95US-00556823.
 XX (REGC) UNIV CALIFORNIA.
 PA Prusiner SB, Kaneko K, Cohen FE;
 PI WPI; 1997-272248/24.
 DR Prion proteins (PrPs) having at least one alpha-helical domain - used in
 XX assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PS Claim 11, Page 7-38; 50pp; English.
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC C). Methods, for screening compounds which inhibit the binding of PrP-C
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC Sequence 142 AA;
 SQ
 Query Match 100.0%; Score 193; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 9.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
 DB 84 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 119
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX ADB63859;
 XX 04-DEC-2003 (first entry)
 XX Human protein encoded by clone ASTR020055570.
 DE Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KW cell regeneration; membrane protein; signal transduction-related protein;
 KW transcription-related protein; osteoporosis; neurological disease;
 KW cancer; tumour.
 XX Homo sapiens.
 XX EP1308459-A2.
 XX 07-MAY-2003.
 XX 28-MAR-2002; 2002EP-00007401.
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX Isoeai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS Claim 1; Page; 222pp; English.
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 SQ Sequence 163 AA;
 QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
 DB 83 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 118
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX ABG31907;
 XX 05-NOV-2002 (first entry)
 XX Human prion protein related peptide #6.
 DE Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX Homo sapiens.
 XX WO200261418-A1.
 XX 08-AUG-2002.
 XX

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XX 31-JAN-2002; 2002WO-JP000803.
XX 31-JAN-2001; 2001JP-00024279.
XX (TOHO) UNITV TOHOKU.
XX Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (PDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention.
XX
SQ Sequence 200 AA;
Query Match 100.0%; Score 193; DB 5; Length 200;
Best Local Similarity 100.0%; Pred. No. 1,4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 36
DB 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 178
RESULT 10
AAB07316
ID AAB07316 standard; protein; 208 AA.
AC AAB07316;
XX
XX 17-OCT-2000 (first entry)
XX
XX Mouse prion protein sequence.
XX
XX Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Mus sp.
XX
XX Key Location/Qualifiers
XX Region 37..68
XX /note="Repeat region consisting of tandem repeats of
XX Disulfide-bond 156..191
XX Modified-site 208
XX /note="C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX WO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX
XX
XX

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XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of Transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
XX
SQ Sequence 208 AA;
Query Match 100.0%; Score 193; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 1,5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 36
DB 150 NNFVHDCVNITIKOHTVTTTGGNFETDVKMER 185
RESULT 11
AAB07318
ID AAB07318 standard; protein; 208 AA.
AC AAB07318;
XX
XX 17-OCT-2000 (first entry)
XX
XX Human prion protein sequence.
XX
XX Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Homo sapiens.
XX
XX Key Location/Qualifiers
XX Region 29..69
XX /note="Repeat region consisting of tandem repeats of
XX Disulfide-bond 157..192
XX Modified-site 208
XX /note="C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX WO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of

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PT transmissible spongiform encephalopathies in bovines.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 XX
 CC The present sequence is the human prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
 DB 151 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 186
 RESULT 12
 ID AAB07327 standard; protein; 208 AA.
 AC AAB07327;
 DT 17-OCT-2000 (first entry)
 XX
 DE Mouse prion protein sequence.
 XX
 KW Mouse; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; TSE diagnosis; Prp.
 XX
 OS Mus sp.
 FH Key Location/Qualifiers
 FT Region 37..68
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 156..191
 FT Modified-site 208
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 41-42; 50pp; English.
 CC
 CC The present sequence is the mouse prion protein (Prp) sequence.

CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a Prp epitope is captured by an
 CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of Prp that is occluded when the Prp is in an aggregated state
 CC
 SQ Sequence 208 AA;
 Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 36
 DB 150 NNFVHDCVNITIKQHTVTTTGGENFTETDVKKMER 185
 RESULT 13
 ID AAB07329 standard; protein; 208 AA.
 AC AAB07329;
 DT 17-OCT-2000 (first entry)
 XX
 DE Human prion protein sequence.
 XX
 KW Human; prion protein; transmissible spongiform encephalopathy;
 KW bovine spongiform encephalopathy; TSE diagnosis; Prp.
 XX
 OS Homo sapiens.
 FH Key Location/Qualifiers
 FT Region 29..69
 FT /note= "Repeat region consisting of tandem repeats of
 FT repeat unit: PHGGGWGQ (AAB07319)"
 FT Disulfide-bond 157..192
 FT Modified-site 208
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 FT
 PN WO200029849-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI; 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 43-44; 50pp; English.
 CC
 CC The present sequence is the human prion protein (Prp) sequence.
 CC Conversion of the normal cellular form of Prp into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 36
 DB 151 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 186

RESULT 14

ABG31902
 ID ABG31902 standard; protein; 208 AA.

XX
 AC ABG31902;

XX
 DT 05-NOV-2002 (first entry)

XX
 DE Human prion protein related protein #2.

XX
 KW Prion; human; follicular dendritic cells; FDC; infection;
 XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Homo sapiens.

XX
 PN MO200261418-A1.

XX
 PD 08-AUG-2002.

XX
 PF 31-JAN-2002; 2002MO-JP000803.

XX
 PR 31-JAN-2001; 2001JP-00024279.

XX
 PA (TOHO) UNIV TOHOKU.

XX
 PI Kitamoto T, Miyoshi K, Mohri S;

XX
 DR WPI; 2002-619277/66.

XX
 PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

XX
 PS Disclosure; Page 49-50; 69pp; Japanese.

XX
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a human prion related protein of the
 CC invention

XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 36
 DB 151 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 186

RESULT 15
 ABG31904
 ID ABG31904 standard; protein; 208 AA.

XX
 AC ABG31904;

XX
 DT 05-NOV-2002 (first entry)

XX
 DE Chimera-type prion protein #2.

XX
 KW Prion; follicular dendritic cells; FDC; infection; blood preparation;
 XX food; cosmetic; CJD; Creutzfeldt-Jacob disease.

OS Synthetic.

XX
 PN MO200261418-A1.

XX
 PD 08-AUG-2002.

XX
 PF 31-JAN-2002; 2002MO-JP000803.

XX
 PR 31-JAN-2001; 2001JP-00024279.

XX
 PA (TOHO) UNIV TOHOKU.

XX
 PI Kitamoto T, Miyoshi K, Mohri S;

XX
 DR WPI; 2002-619277/66.

XX
 PT Screening (non-)human prion disease infection factor based on abnormal
 PT prion protein sedimentation in non-human follicular dendritic cells as
 PT indication, applicable in safety test on e.g. drugs and cosmetics.

XX
 PS Claim 9; Page 55-57; 69pp; Japanese.

XX
 CC This invention relates to a novel method for screening human or non-
 CC human prion disease infection factor in a sample by using abnormal prion
 CC protein sedimentation in non-human follicular dendritic cells (FDC) as
 CC indication. The method of the invention is useful for screening (non-)
 CC human prion disease infection factor, which is applicable in safety tests
 CC on drugs like blood preparations, foods and cosmetics, and for developing
 CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 CC disease (CJD). The method of the invention is simple and quick. The
 CC present sequence represents a chimeric type prion related protein of the
 CC invention

XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 193; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 1.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 36
 DB 151 NNPFVHDCVNITIKOHTVTTTGGNFETDVKMMER 186

Search completed: December 3, 2004, 00:55:38
 Job time : 59.6066 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITTKQHTVTITTKGNTFTEDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	* Query Match	Length	DB ID	Description
1	193	100.0	226	2 A53892	p1on-related prot
2	193	100.0	232	2 S71041	major prion protei
3	193	100.0	241	2 S71048	major prion protei
4	193	100.0	241	2 S71056	major prion protei
5	193	100.0	245	2 S53627	major prion protei
6	193	100.0	245	2 S71045	major prion protei
7	193	100.0	252	2 S53634	major prion protei
8	193	100.0	252	2 S53631	major prion protei
9	193	100.0	253	1 U7HU	major prion protei
10	193	100.0	253	2 S53624	major prion protei
11	193	100.0	253	2 S53623	major prion protei
12	193	100.0	253	2 S53620	major prion protei
13	193	100.0	253	2 S53625	major prion protei
14	193	100.0	253	2 S71053	major prion protei
15	193	100.0	253	2 S71055	major prion protei
16	193	100.0	253	2 S53617	major prion protei
17	193	100.0	253	2 S53615	p1on protein - 81
18	193	100.0	253	2 S53614	major prion protei
19	193	100.0	253	2 I37032	major prion protei
20	193	100.0	253	2 I61847	major prion protei
21	193	100.0	253	2 S53616	major prion protei
22	193	100.0	253	2 S53618	major prion protei
23	193	100.0	253	2 S53619	major prion protei
24	193	100.0	254	2 B34759	p1on protein - 90
25	193	100.0	254	2 A24759	p1on protein - Ch
26	193	100.0	254	2 A23544	major prion protei
27	192	99.5	252	2 I61848	major prion protei
28	192	99.5	260	2 S53629	major prion protei
29	191	99.0	264	2 S37137	p1on protein - gr

30	189	97.9	239	2 S53633	major prion protei
31	188	97.4	254	1 U7HYH	major prion Pr-Sc
32	188	97.4	256	2 U7H268	major prion protei
33	188	97.4	257	2 A23545	major prion PrP27-
34	188	97.4	264	2 A54330	major prion protei
35	187	96.9	256	2 S37149	p1on protein - 90
36	187	96.9	256	2 A54281	major prion protei
37	185	95.9	257	2 J01900	major prion protei
38	182	94.3	252	2 J06175	p1on protein - ra
39	58	30.1	139	2 H90004	hypothetical prote
40	54	28.0	423	2 E97165	flagellar hook pro
41	54	28.0	511	2 C69199	phenylalanine-tRNA
42	53	27.5	267	1 U7CH	major prion protei
43	53	27.5	267	2 A37372	p1on protein homo
44	53	27.5	273	2 A46280	p1on protein - ch
45	53	27.5	346	2 B71496	cryptophan-tRNA 11

ALIGNMENTS

RESULT 1
A53892
p1on-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C/Accession: A53892
R/Lao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Burton, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A/Reference number: A53892; MUID:88037055; PMID:288948
A/Accession: A53892
A/Status: preliminary
A/Molecule type: mRNA
A/Residues: 1-226 <LIA>
A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C/Superfamily: major prion protein

Query Match 100.0%; Score 193; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTITTKGNTFTEDVKMER 36
DB 145 NNFVHDCVNITTKQHTVTITTKGNTFTEDVKMER 180

RESULT 2
S71041
major prion protein - black-handed spider monkey (fragment)
C/Species: Ateles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71041; S53630
R/Schatz, H.M.
submitted to the EMBL data library, April 1994
A/Reference number: S71041
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-232 <SCH>
A/Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G47437.
R/Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: P1on protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53630
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-194, 'R', 196-231 <SCH>
A/Cross-references: EMBL:U08309
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 4,1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36

Db 157 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 192

RESULT 3

S71048

major prion protein - Calliebus moloch (fragment)
C/Species: Calliebus moloch
C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S71048; S53632
R/Schaeztl, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71048

A/Molecule type: DNA
A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G4755
R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53632
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCM>
A/Cross-references: EMBL:U08312
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36

Db 166 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 201

RESULT 4

S71056

major prion protein - mandrill (fragment)
C/Species: Papio sphinx, Mandrillus sphinx (mandrill)
C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Reference number: S53621
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71056

A/Molecule type: DNA
A/Residues: 1-241 <SCH>
A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCM>
A/Cross-references: EMBL:U08303
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 241;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36

Db 166 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 201

RESULT 5

S53627

major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53627
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291
R/Schaeztl, H.M.

Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71043
A/Molecule type: DNA

A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCM>
A/Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50080.1; PID:G474341
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36

Db 165 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 200

RESULT 6

S71045

major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

A/Title: Prion protein gene variation among primates.
A/Reference number: S53628
R/Schaeztl, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71045

A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G47434

R/Schaeztl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
U. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53628
A/Status: nucleic acid sequence not shown

A/Molecule type: DNA
A/Residues: 8-10, 'U', 12-202, 'R', 204-239 <SCM>
A/Cross-references: EMBL:U08292
C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 193; DB 2; Length 245;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 36

Db 165 NNFVHDCVNITIKOHTVTTTGGKGFETDVKMER 200

RESULT 7

S53634


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major prion protein - common marmoset
C:Species: Callithrix jacchus (common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53634
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Accession: S71047
A:Reference number: S71041
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
|||||
Db 172 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 207

RESULT 8
major prion protein - brown capuchin
C:Species: Cebus apella (brown capuchin, black-capped capuchin)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53631; S71044
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53631
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40249; EMBL:U08295
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Accession: S71041
A:Reference number: S71044
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
|||||
Db 172 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 207

RESULT 9
major prion protein precursor - human
N:Alternate names: 11k amyloid protein; 27-30Kialoglycoprotein; PrP 27-30; PrP 33-35C;
C:Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A44173; A40372; A05011; S14078; I54322; I68597; I58135; I59184; I79633; I79719;

```

R:Kretzschmar, A.; Störting, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; De
 DNA 5, 315-324, 1986
 A>Title: Molecular cloning of a human prion protein cDNA.
 A:Reference number: A24173; MUID:86300093; PMID:3755672
 A:Accession: A24173
 A:Molecule type: mRNA
 A:Residues: 1-253 <KRE>
 A:CROSS-references: UNIPROT:P04156; GB:M13899; NID:G190467; PIDN:AAA60182.1; PID:G190468
 R:Puckett, C.; Concannon, P.; Casey, C.; Hood, L.
 Am. J. Hum. Genet. 49, 320-329, 1991
 A>Title: Genomic structure of the human prion protein gene.
 A:Reference number: A40372; MUID:91328137; PMID:1678248
 A:Accession: A40372
 A>Status: not compared with conceptual translation
 A:Molecule type: DNA
 A:Residues: 1-80, 89-253 <PUC>
 A:CROSS-references: GB:X83416; NID:G747846; PIDN:CAA58442.1; PID:G747847
 A>Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not b
 R:Lião, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
 Science 233, 364-367, 1986
 A:Reference number: A05017; MUID:86261778; PMID:3014653
 A:Accession: A05017
 A:Molecule type: mRNA
 A:Residues: 8-117, 119-253 <LTA>
 A:CROSS-references: GB:DD0015; NID:G220015; PIDN:BAAO0011.1; PID:G220016; GB:M13667; NID
 R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,
 EMBO J. 10, 513-519, 1991
 A>Title: Amyloid protein of Gerstmann-Sträussler-Scheinker disease (Indiana kindred) is
 A:Reference number: S14078; MUID:91160504; PMID:1672107
 A:Accession: S14078
 A:Molecule type: Protein
 A:Residues: 58-72, X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>
 R:Didrich, J.F.; Knopman, D.S.; Last, J.F.; Olson, K.; Frey, W.H.
 Hum. Mol. Genet. 1, 443-444, 1992
 A>Title: Deletion in the prion protein gene in a deceased patient.
 A:Reference number: I54322; MUID:93250789; PMID:1363802
 A:Accession: I54322
 A>Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 9-83, 92-240 <RES>
 A:CROSS-references: GB:M81929; NID:G190517; PIDN:AAB59442.1; PID:G190518
 A:Accession: I68597
 A>Status: translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 8-240 <RE3>
 A:CROSS-references: GB:M81930; NID:G190519; PIDN:AAB59443.1; PID:G190520
 R:Brown, P.; Goldfarb, L.G.; McComb, W.R.; Nieto, A.; Squillacote, D.; Shigemata, W.; I
 Neurology 42, 422-427, 1992
 A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
 A:Reference number: I58135; MUID:92140671; PMID:1736177
 A:Accession: I58135
 A>Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 51-91, 'PHGGGGMQPHGGGGMQPHGGGGMQPHGGGGMQPHGGG' <RE2>
 A:CROSS-references: GB:S80539; NID:G244698; PIDN:AAB21334.1; PID:G244699
 R:Goldfabe, L.G.; Brown, P.; McComb, W.R.; Goldfabe, D.; Swergold, G.D.; Wille, P.R.;
 Proc. Natl. Acad. Sci. U.S.A. 89, 10926-10930, 1991
 A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, ar
 A:Reference number: I59184; MUID:92073400; PMID:1683708
 A:Accession: I59184
 A>Status: translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 60-67 <GOL>
 A:CROSS-references: GB:S71208; NID:G239877; PIDN:AAB20521.1; PID:G239878; GB:S71210; NID
 C:Genetics:
 A:Gene: GDB:PRNP; CJD; PRIP
 A:CROSS-references: GDB:120720; OMIM:176640; OMIM:137440
 A:Map position: 20pter-20p12
 A:introns: #status absent
 A>Note: one intron occurs before the initiator codon
 C:Superfamily: major prion protein
 C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy-

F1:22/Domain: signal sequence #status predicted <SIG>
 F1:23-230/Product: major prion protein #status predicted <MAT>
 F1:54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
 F1:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F1:179-214/Distal: disulfide bonds: #status predicted
 F1:81-197/Binding site: carboxylate (Asn) (covalent) #status predicted
 F1:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 36
 DB 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 208

RESULT 10

S53624

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53624; S71051

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53624

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08311

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71051

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08311; NID:9475583; PIDN:AACS009.1; PID:9475584

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 36

DB 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 208

RESULT 11

S53623

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53623; S71052

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53623

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08298

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71052

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08298; NID:9474354; PIDN:AACS0087.1; PID:9474355

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 36
 DB 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 208

RESULT 12

S53620

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53620; S71058

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53620

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08294

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71058

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08294; NID:9474346; PIDN:AACS0083.1; PID:9474347

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 36

DB 173 NNFVHDCVNTTIKQHTVTTTGGNFETEDVKMMR 208

RESULT 13

S53625

major prion protein - Japanese macaque

C/Species: Macaca fuscata (Japanese macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53625; S71053

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53625

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08301

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71053

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCW>

A/Cross-references: EMBL:U08301; NID:9474360; PIDN:AACS0090.1; PID:9474361

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
 |||||
 DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C:Species: Macaca mulatta (rhesus macaque)

C:Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004

C:Accession: I84423; S53622; S71054

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; PMID:95139066; PMID:7837269

A:Accession: I84423

A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA

A:Residues: 1-253 <RES>

A:Cross-references: UNIPROT:P40254; EMBL:U08307; NID:G9595850; PID:AAA68635.1; PID:G95958

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; PMID:95139066; PMID:7837269

A:Accession: S53622

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-210, 'R', 212-253 <SCH>

A:Cross-references: EMBL:U08307

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71041

A:Reference number: S71054

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08307; NID:G9474372; PID:AA050095.1; PID:G9474373

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
 |||||
 DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C:Species: Macaca nemestrina (pig-tailed macaque)

C:Date: 14-Feb-1997 #sequence revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71055; S53626

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Accession: S71041

A:Reference number: S71054

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G9474370; PID:AA050094.1; PID:G94743

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; PMID:95139066; PMID:7837269

A:Accession: S53626

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-210, 'R', 212-247 <SCW>

A:Cross-references: EMBL:U08306

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;

Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
 |||||
 DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 208

Search completed: December 3, 2004, 00:38:40

Job time: 11.8 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 58.1902 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214
Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGTGKGFETEDVMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt 02:*
1: uniprot_sprot:*
2: uniprot_tramb1:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	232	1	P40246 ateles geof
2	193	100.0	238	1	Q95145 cercocebus
3	193	100.0	238	1	P40246 ateles geof
4	193	100.0	238	2	Q86XR1 cercocebus
5	193	100.0	240	2	Q8VHV4 cercocebus
6	193	100.0	241	1	P40248 cercocebus
7	193	100.0	241	1	P40250 cercocebus
8	193	100.0	245	1	P40250 cercocebus
9	193	100.0	246	1	P40250 cercocebus
10	193	100.0	246	1	P40250 cercocebus
11	193	100.0	246	1	P40250 cercocebus
12	193	100.0	246	1	P40250 cercocebus
13	193	100.0	246	1	P40250 cercocebus
14	193	100.0	248	2	Q8VHV5 cercocebus
15	193	100.0	252	1	P40247 cercocebus
16	193	100.0	252	1	P40249 cercocebus
17	193	100.0	253	1	P40251 cercocebus
18	193	100.0	253	1	P40251 cercocebus
19	193	100.0	253	1	P40251 cercocebus
20	193	100.0	253	1	P40251 cercocebus
21	193	100.0	253	1	P40251 cercocebus
22	193	100.0	253	1	P40251 cercocebus
23	193	100.0	253	1	P40251 cercocebus
24	193	100.0	253	1	P40251 cercocebus
25	193	100.0	253	1	P40251 cercocebus
26	193	100.0	253	2	Q6FGH8 cercocebus
27	193	100.0	253	2	Q6JL99 cercocebus
28	193	100.0	253	2	Q9Z0T5 cercocebus
29	193	100.0	253	2	AAS80162 cercocebus
30	193	100.0	253	2	AAR12192 cercocebus
31	193	100.0	254	1	P40250 cercocebus

32	193	100.0	254	1	P40246 ateles geof
33	193	100.0	254	1	Q95145 cercocebus
34	193	100.0	254	1	P40246 ateles geof
35	193	100.0	254	1	Q95145 cercocebus
36	193	100.0	254	2	Q86XR1 cercocebus
37	193	100.0	254	2	Q8VHV4 cercocebus
38	193	100.0	254	2	Q8VHV5 cercocebus
39	193	100.0	277	2	AAD19993 cercocebus
40	193	100.0	277	2	AAR21603 cercocebus
41	193	100.0	285	2	Q75942 cercocebus
42	192	99.5	220	2	Q866W7 cercocebus
43	192	99.5	248	2	Q866V6 cercocebus
44	192	99.5	260	1	P40258 cercocebus
45	191	99.0	215	2	Q811W3 cercocebus

ALIGNMENTS

RESULT 1
ID P40246; STANDARD; PRT; 232 AA.
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Ateles geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.ebi.ac.uk/announcements> or send an email to license@ebi.ac.uk).
CC EMBL: U08309; AAC50097.1; -.
CC PIR: S71041; S71041.
CC HSSP: P23907; 1G04.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC Pfam: PF03991; Prion; octapep; 5.
CC PRINTS: PR00341; PRION.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC NON_TER 1
CC SIGNAL <1 15
CC CHAIN 16 214
CC PROPEP 215 232
CC LIPID 214 214
CC By similarity.
CC Major prion protein.
CC Removed in mature form (By similarity).
CC GPI-anchor amidated serine (By similarity).

```

FT DISULFID 163 198 By similarity.
FT CARBOHYD 165 165 N-linked (GlcNAc...) (potential).
FT CARBOHYD 181 181 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 84 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 51 Q.
FT REPEAT 52 59 By similarity.
FT REPEAT 60 67 N-linked (GlcNAc...) (potential).
FT REPEAT 68 75 N-linked (GlcNAc...) (potential).
FT NON_TER 232 232 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 193; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 5,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKMMER 36
Db 157 NNFVHDCVNITIKQHTVTTTNGENFTETDVKMMER 192

RESULT 2
PRIO_CERAT STANDARD; PRT; 238 AA.
ID 095145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PpP27-30) (PpP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecidae; Cercopithecus.
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
ON NCBI_TaxID=36222, 9546;
[1]
SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF03991; Prion; 1.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; Prion_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW

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FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 215 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc...) (potential).
FT CARBOHYD 182 182 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 51 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3B531B CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKMMER 36
Db 158 NNFVHDCVNITIKQHTVTTTNGENFTETDVKMMER 193

RESULT 3
PRIO_THEGE STANDARD; PRT; 238 AA.
ID 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PpP27-30) (PpP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PR;
OS Theriophilus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theriophilus.
ON NCBI_TaxID=9565;
[1]
SEQUENCE FROM N.A.
RA van der Kuyt A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF03991; Prion; 1.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; Prion_1; 1.

```

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 15 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT DISULFID 164 199 By similarity.
FT LIPID 215 GPI-anchor amidated serine (By similarity).
FT CARBOHYD 166 166 N-linked (GLCNAC..)(Potential).
FT CARBOHYD 182 182 N-linked (GLCNAC..)(Potential).
FT DOMAIN 44 83 4 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BFF602243EDB CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 193

RESULT 4
Q06XR1 PRELIMINARY; PRT; 238 AA.
AC Q06XR1;
DT 01-JUN-2003 (TRENBLREL. 24, Created)
DT 01-JUN-2003 (TRENBLREL. 24, Last sequence update)
DT 01-MAR-2004 (TRENBLREL. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OC NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JUN-2003) to the EMBL/Genbank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AA083635.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match 100.0%; Score 193; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 193

RESULT 5
Q08VH4 PRELIMINARY; PRT; 240 AA.
AC Q08VH4;

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DT 01-MAR-2002 (TRENBLREL. 20, Created)
DT 01-MAR-2002 (TRENBLREL. 20, Last sequence update)
DT 01-JUN-2003 (TRENBLREL. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OX NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omio G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/Genbank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match 100.0%; Score 193; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 5.4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 200

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
ID PRIO_CALMO
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Callitrichus moloch (Dusky titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
OC Callitrichus.
OX NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RA MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases Kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC or send an email to license@isb-sib.ch.)
CC -----
DR EMBL; U08312; AAC50100.1; -.
DR PIR; S71048; S71048.
DR HSSP; P23907; IG04.
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion; 6.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT SIGNAL 1 1
FT CHAIN 16 223 By similarity.
FT PROPEP 224 >241 Major prion protein.
FT DISULFID 172 207 Removed in mature form (By similarity).
FT LIPID 223 223 By similarity.
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 53 60 By similarity.
FT REPEAT 61 68 Major prion protein.
FT REPEAT 69 76 Removed in mature form (By similarity).
FT REPEAT 77 84 GPI-anchor amidated serine (By
FT NON TER 241 241 similarity).
SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CABC93 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 5, 4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHVTITTKGNTFTDVKMER 36
Db 166 NNFVHDCVNTTKKHVTITTKGNTFTDVKMER 201

RESULT 7
PRIO MANSP STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Mandrilus sphinx (Mandrill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Mandrillinae.
NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSF),

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CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch.)
CC -----
DR EMBL; U08303; AAC50091.1; -.
DR PIR; S71056; S71056.
DR HSSP; P23907; IG04.
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion; 6.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 1
FT CHAIN 16 223 By similarity.
FT PROPEP 224 >241 Major prion protein.
FT DISULFID 172 207 Removed in mature form (By similarity).
FT LIPID 223 223 GPI-anchor amidated serine (By
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 Q.
FT REPEAT 53 60 By similarity.
FT REPEAT 61 68 Major prion protein.
FT REPEAT 69 76 Removed in mature form (By similarity).
FT REPEAT 77 84 GPI-anchor amidated serine (By
FT NON TER 241 241 similarity).
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 5, 4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNTTKKHVTITTKGNTFTDVKMER 36
Db 166 NNFVHDCVNTTKKHVTITTKGNTFTDVKMER 201

RESULT 8
PRIO CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OC Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
NCBI_TaxID=9534, 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

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```

CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC
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CC      or send an email to license@isb-sib.ch).
CC
CC      EMBL: U08291; AAC50080.1; -.
CC      EMBL: U08292; AAC50081.1; -.
CC      PIR: S53627; S53627.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      SIGNAL 1 22
CC      CHAIN 23 222
CC      PROPEP 223 245
CC      LIPID 222 222
CC
CC      DISUPRID 171 206
CC      CARBOHYD 173 173
CC      CARBOHYD 189 189
CC      DOMAIN 51 83
CC
CC      REPEAT 51 59
CC      REPEAT 60 67
CC      REPEAT 68 75
CC      REPEAT 76 83
CC      SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;
CC
Query Match 100.0%; Score 193; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC
Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 200

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RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC
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CC      or send an email to license@isb-sib.ch).
CC
CC      EMBL: U75386; AAB50625.1; -.
CC      HSSP: P23907; 1G04.
CC      InterPro: IPR000817; Prion.
CC      Pfam: PF00377; Prion; 1.
CC      PRINTS: PR00341; PRION.
CC      PROSITE: PS00291; PRION_1; 1.
CC      PROSITE: PS00706; PRION_2; 1.
CC      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      NON TER 1 1
CC      SIGNAL <1 15
CC      CHAIN 16 223
CC      PROPEP 224 246
CC      LIPID 223 223
CC
CC      DISUPRID 172 207
CC      CARBOHYD 174 174
CC      CARBOHYD 190 190
CC      DOMAIN 44 84
CC
CC      REPEAT 44 52
CC      REPEAT 53 60
CC      REPEAT 61 68
CC      REPEAT 69 76
CC      REPEAT 77 84
CC      SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
CC
Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC
Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201

```

RA van der Kuyl A.C., Dekker J.T., Goudemir J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru and
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75387; AAB50626.1; -.
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC NON TER 1 1
 CC SIGNAL <1 15
 CC CHAIN 16 223
 CC PROPEP 224 246
 CC LIPID 223 223
 CC DISULFID 172 207
 CC CARBOHYD 174 174
 CC CARBOHYD 190 190
 CC DOMAIN 44 84
 CC REPEAT 44 52
 CC REPEAT 53 60
 CC REPEAT 61 68
 CC REPEAT 69 76
 CC REPEAT 77 84
 CC SEQUENCE 246 AA; 26900 MW; 835D147CA284FDD3 CRC64;
 CC Query Match 100.0%; Score 193; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFVHDCVNTTIKQHTVTTTNGENTFTDVKMER 36
 CC Db 166 NNFVHDCVNTTIKQHTVTTTNGENTFTDVKMER 201
 CC
 CC RESULT 11
 CC PRTIO CERTO STANDARD; PRT; 246 AA.
 CC ID PRTIO CERTO STANDARD; PRT; 246 AA.
 CC AC Q95176;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrP;
 CC OS Cercopithecus torquatus alys (Red-crowned mangabey) (Sooty mangabey).
 CC OC Bakiyotia; Mammalia; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Butheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecinae; Cercopithecus.

OX NCBI_TaxID=9531;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Goudemir J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion.";
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC animals infected with the degenerative neurological diseases kuru and
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 CC EMBL: U75385; AAB50628.1; -.
 CC HSSP: P23907; IG04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC NON TER 1 1
 CC SIGNAL <1 15
 CC CHAIN 16 223
 CC PROPEP 224 246
 CC LIPID 223 223
 CC DISULFID 172 207
 CC CARBOHYD 174 174
 CC CARBOHYD 190 190
 CC DOMAIN 44 84
 CC REPEAT 44 52
 CC REPEAT 53 60
 CC REPEAT 61 68
 CC REPEAT 69 76
 CC REPEAT 77 84
 CC SEQUENCE 246 AA; 26914 MW; F58679CBBC5AD07 CRC64;
 CC Query Match 100.0%; Score 193; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 5.5e-18;
 CC Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFVHDCVNTTIKQHTVTTTNGENTFTDVKMER 36
 CC Db 166 NNFVHDCVNTTIKQHTVTTTNGENTFTDVKMER 201
 CC
 CC RESULT 12
 CC PRTIO ERYPA STANDARD; PRT; 246 AA.
 CC ID PRTIO ERYPA STANDARD; PRT; 246 AA.
 CC AC Q95174;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrP;
 CC OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

```

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecoidea; Erythrocebus.
OC NCBI_TaxID=9538;
RN [1]
RN SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudsmit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: U75388; AAB50627.1; -.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; Prion.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KM NON_TER 1
FT SIGNAL 1
FT CHAIN 15 By similarity.
FT PROPEP 224 Major prion protein.
FT LIPID 223 Removed in mature form (By similarity).
FT LIPID 223 GPI-anchor amidated serine (By
FT LIPID 223 similarity).
FT DISULFID 172 207 By similarity.
FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
FT DOMAIN 44 84 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 76 4.
FT REPEAT 77 84 5.
SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201

```

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DE Prion protein (Fragment).
GN PRNP.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
RN [1]
RN SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RT "Polymorphisms of the prion protein gene in Korea."
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY219883; AAO83636.1; -.
KM Prion.
FT NON_TER 1
FT NON_TER 246 1
SQ SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
Query Match 100.0%; Score 193; DB 2; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
DB 166 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 201

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RESULT 13
AAO83636 PRELIMINARY; PRT; 246 AA.
AC AAO83636;
DT 02-MAR-2004 (Tremblrel. 27, Created)
DT 02-MAR-2004 (Tremblrel. 27, Last sequence update)
DT 02-MAR-2004 (Tremblrel. 27, Last annotation update)

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RESULT 15
PRIO_CALJA STANDARD; PRT; 252 AA.
AC P40247;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Calitthrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrich.
OX NCBI_TaxID=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL; U08304; AAC50092.1; -.
DR PIR; S53634; S53634.
DR DR HSPSP; P23907; I604.
DR DR InterPro; IPR000817; Prion.
DR DR Pfam; PF00377; Prion; 1.
DR DR Pfam; PF03991; Prion octapep; 6.
DR DR PRINTS; PR00341; PRION.
DR DR PROSITE; PS00291; PRION_1; 1.
DR DR PROSITE; PS00706; PRION_2; 1.
DR DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW SIGNAL
FT 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
FT REPEAT 90 5.
SQ SEQUENCE 252 AA; 27639 MW; B2800860FDC664 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 5.7e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Search completed: December 3, 2004, 00:35:30
 Job time : 59.1902 secs

GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNPFVHDCVNITIKQHTVTTTKGENFTEDVKMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2_6/ptoddata/1/iaa/5A_COMB.pep.*
2: /cgn2_6/ptoddata/1/iaa/5B_COMB.pep.*
3: /cgn2_6/ptoddata/1/iaa/6A_COMB.pep.*
4: /cgn2_6/ptoddata/1/iaa/6B_COMB.pep.*
5: /cgn2_6/ptoddata/1/iaa/PCTUS_COMB.pep.*
6: /cgn2_6/ptoddata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	142	1	US-08-556-823-10 Sequence 10, Appl
2	193	100.0	245	4	US-09-431-887-5 Sequence 5, Appl
3	193	100.0	245	4	US-09-431-887-15 Sequence 15, Appl
4	193	100.0	252	4	US-09-431-887-13 Sequence 13, Appl
5	193	100.0	252	4	US-09-431-887-17 Sequence 17, Appl
6	193	100.0	253	1	US-08-242-188-2 Sequence 2, Appl
7	193	100.0	253	1	US-08-509-261A-2 Sequence 2, Appl
8	193	100.0	253	1	US-08-660-626-8 Sequence 8, Appl
9	193	100.0	253	1	US-08-692-892-2 Sequence 2, Appl
10	193	100.0	253	2	US-08-713-939A-2 Sequence 2, Appl
11	193	100.0	253	2	US-08-868-162A-22 Sequence 22, Appl
12	193	100.0	253	3	US-09-031-168-8 Sequence 2, Appl
13	193	100.0	253	3	US-09-128-450-20 Sequence 20, Appl
14	193	100.0	253	3	US-09-036-579-2 Sequence 2, Appl
15	193	100.0	253	3	US-09-823-494-20 Sequence 20, Appl
16	193	100.0	253	3	US-09-550-374-2 Sequence 2, Appl
17	193	100.0	253	4	US-09-431-887-1 Sequence 1, Appl
18	193	100.0	253	4	US-09-431-887-2 Sequence 2, Appl
19	193	100.0	253	4	US-09-431-887-3 Sequence 3, Appl
20	193	100.0	253	4	US-09-431-887-4 Sequence 4, Appl
21	193	100.0	253	4	US-09-431-887-7 Sequence 7, Appl
22	193	100.0	253	4	US-09-431-887-8 Sequence 8, Appl
23	193	100.0	253	4	US-09-431-887-9 Sequence 9, Appl
24	193	100.0	253	4	US-09-431-887-10 Sequence 10, Appl
25	193	100.0	253	4	US-09-431-887-11 Sequence 11, Appl
26	193	100.0	253	4	US-09-431-887-12 Sequence 12, Appl
27	193	100.0	253	4	US-09-431-887-14 Sequence 14, Appl

28	193	100.0	253	4	US-09-431-887-16 Sequence 16, Appl
29	193	100.0	253	4	US-09-431-887-18 Sequence 18, Appl
30	193	100.0	253	4	US-09-431-887-19 Sequence 19, Appl
31	193	100.0	253	4	US-09-943-906-2 Sequence 2, Appl
32	193	100.0	253	4	US-09-669-516C-8 Sequence 8, Appl
33	193	100.0	253	4	US-09-919-172-57 Sequence 57, Appl
34	193	100.0	253	4	US-09-976-594-72 Sequence 72, Appl
35	193	100.0	253	4	US-09-904-987-3 Sequence 3, Appl
36	193	100.0	254	1	US-08-242-188-1 Sequence 1, Appl
37	193	100.0	254	1	US-08-509-261A-1 Sequence 1, Appl
38	193	100.0	254	1	US-08-660-626-7 Sequence 7, Appl
39	193	100.0	254	1	US-08-692-892-1 Sequence 1, Appl
40	193	100.0	254	2	US-08-713-939A-1 Sequence 1, Appl
41	193	100.0	254	2	US-08-868-162A-21 Sequence 21, Appl
42	193	100.0	254	3	US-09-031-168-7 Sequence 7, Appl
43	193	100.0	254	3	US-09-128-450-19 Sequence 19, Appl
44	193	100.0	254	3	US-09-128-450-28 Sequence 28, Appl
45	193	100.0	254	3	US-09-036-579-1 Sequence 1, Appl

ALIGNMENTS

```
RESULT 1
US-08-556-823-10
; Sequence 10, Application US/08556823
; Patent No. 5750361
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Kiyotoshi Kaneko
; APPLICANT: Fred E. Cohen
; TITLE OF INVENTION: Formation and use of prion protein
; TITLE OF INVENTION:
; NUMBER OF SEQUENCES: 10
; CORRESPONDENCE ADDRESSES:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/556,823
; FILING DATE:
; CLASSIFICATION: 530
; ATTORNEY/AGENT INFORMATION:
; NAME: Valetta Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 142 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 7.4e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNPFVHDCVNITIKQHTVTTTKGENFTEDVKMMER 36
DB 84 NNPFVHDCVNITIKQHTVTTTKGENFTEDVKMMER 119
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RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 200

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 200

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 207

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 207

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSER: Karl Bobicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

FILED DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-660-626-8

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTGGKNTFTDVKMMR 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrp
US-08-692-892-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTKGNETETDVKKMER 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962569
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFFVDCVNITIKQHTVTTTGGENTETDVKKMER 208

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFFVDCVNITIKQHTVTTTGGENTETDVKKMER 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFFVDCVNITIKQHTVTTTGGENTETDVKKMER 208

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

! TOPOLOGY: linear
! MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
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DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 208

RESULT 15
US-09-823-494-20
; Sequence 20, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Cheesbro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Susele
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36
|||
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:18:57
Job time: 14.6328 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(Without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTKGENTEDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB.pep:*
- 2: /cgn2_6/ptodata/1/pubppaa/PCT_NEW_PUB.pep:*
- 3: /cgn2_6/ptodata/1/pubppaa/US06_NEW_PUB.pep:*
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- 5: /cgn2_6/ptodata/1/pubppaa/US07_NEW_PUB.pep:*
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- 9: /cgn2_6/ptodata/1/pubppaa/US09_PUBCOMB.pep:*
- 10: /cgn2_6/ptodata/1/pubppaa/US09C_PUBCOMB.pep:*
- 11: /cgn2_6/ptodata/1/pubppaa/US09_NEW_PUB.pep:*
- 12: /cgn2_6/ptodata/1/pubppaa/US10_PUBCOMB.pep:*
- 13: /cgn2_6/ptodata/1/pubppaa/US10C_PUBCOMB.pep:*
- 14: /cgn2_6/ptodata/1/pubppaa/US10B_PUBCOMB.pep:*
- 15: /cgn2_6/ptodata/1/pubppaa/US10D_PUBCOMB.pep:*
- 16: /cgn2_6/ptodata/1/pubppaa/US10P_PUBCOMB.pep:*
- 17: /cgn2_6/ptodata/1/pubppaa/US10P_NEW_PUB.pep:*
- 18: /cgn2_6/ptodata/1/pubppaa/US11_NEW_PUB.pep:*
- 19: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB.pep:*
- 20: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	117	US-10-050-902-348	Sequence 348, App
2	193	100.0	117	US-10-050-998-348	Sequence 348, App
3	193	100.0	117	US-10-346-190-89	Sequence 89, Appl
4	193	100.0	124	US-10-050-902-324	Sequence 324, App
5	193	100.0	124	US-10-050-998-324	Sequence 324, App
6	193	100.0	124	US-10-346-190-93	Sequence 93, Appl
7	193	100.0	141	US-10-612-356A-1	Sequence 1, Appl1
8	193	100.0	162	US-09-745-003-10	Sequence 10, Appl
9	193	100.0	163	US-10-104-047-2013	Sequence 2013, Ap
10	193	100.0	164	US-09-745-003-12	Sequence 12, Appl
11	193	100.0	200	US-10-470-848-10	Sequence 10, Appl
12	193	100.0	208	US-10-470-848-3	Sequence 3, Appl
13	193	100.0	208	US-10-745-393-1	Sequence 1, Appl1

14	193	100.0	209	16	US-10-470-848-6	Sequence 6, Appl1
15	193	100.0	209	16	US-10-470-848-7	Sequence 7, Appl1
16	193	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl
17	193	100.0	225	15	US-10-301-448-25	Sequence 25, Appl
18	193	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	193	100.0	245	14	US-10-304-630-5	Sequence 5, Appl1
20	193	100.0	245	14	US-10-304-630-15	Sequence 15, Appl
21	193	100.0	252	14	US-10-304-630-13	Sequence 13, Appl
22	193	100.0	252	14	US-10-304-630-17	Sequence 17, Appl
23	193	100.0	253	9	US-09-823-494-20	Sequence 20, Appl
24	193	100.0	253	9	US-09-904-987-3	Sequence 3, Appl1
25	193	100.0	253	9	US-09-919-172-57	Sequence 57, Appl
26	193	100.0	253	9	US-09-943-906-2	Sequence 2, Appl1
27	193	100.0	253	14	US-10-304-630-1	Sequence 1, Appl1
28	193	100.0	253	14	US-10-304-630-2	Sequence 2, Appl1
29	193	100.0	253	14	US-10-304-630-3	Sequence 3, Appl1
30	193	100.0	253	14	US-10-304-630-4	Sequence 4, Appl1
31	193	100.0	253	14	US-10-304-630-7	Sequence 7, Appl1
32	193	100.0	253	14	US-10-304-630-8	Sequence 8, Appl1
33	193	100.0	253	14	US-10-304-630-9	Sequence 9, Appl1
34	193	100.0	253	14	US-10-304-630-10	Sequence 10, Appl
35	193	100.0	253	14	US-10-304-630-11	Sequence 11, Appl
36	193	100.0	253	14	US-10-304-630-12	Sequence 12, Appl
37	193	100.0	253	14	US-10-304-630-14	Sequence 14, Appl
38	193	100.0	253	14	US-10-304-630-16	Sequence 16, Appl
39	193	100.0	253	14	US-10-304-630-18	Sequence 18, Appl
40	193	100.0	253	14	US-10-304-630-19	Sequence 19, Appl
41	193	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl
42	193	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl
43	193	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl
44	193	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl1
45	193	100.0	253	14	US-10-346-190-79	Sequence 79, Appl

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tilsot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 2

US-10-050-898-348
Sequence 348, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurel, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.019005
CURRENT APPLICATION NUMBER: US/10/050.898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:

OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 3

US-10-346-190-89
Sequence 89, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:

APPLICANT: Bachmann, Martin
APPLICANT: Maurel, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.029003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050.902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 89
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 4

US-10-050-902-324
Sequence 324, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurel, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.019004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:

OTHER INFORMATION: mPrp construct
US-10-050-902-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 53 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 88

RESULT 5

US-10-050-898-324
Sequence 324, Application US/10050898
Publication No. US2003017571A1
GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin

APPLICANT: Tisot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 53 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellucio, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Pricn Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 53 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lohs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: PatentIn version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 84 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PTP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 36
DB 82 NNFVHDCVNITIKQHTVTTTGGKGFETDVKMMR 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: PatentIn Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 193; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 6,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 118

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: Prp2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 193; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 6,9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
Db 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 117

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCF
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 193; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 8,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36

Db 143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 178

RESULT 12
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCF
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 193; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Paatz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Scharschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptide/prolyl isomerase
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 0115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 193; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 36
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMMR 186

RESULT 14

```
US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence:ChM-type prion protein
US-10-470-848-6

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
      |||||||
Db      151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 186

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match          100.0%; Score 193; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 9.2e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 36
      |||||||
Db      151 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMER 186

Search completed: December 3, 2004, 01:07:46
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:13:52 ; Search time 66.2295 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTTTIGENFTETDVKMERVHQ 40

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Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 35872929 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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- 2: geneseqp1990s:*
- 3: geneseqp2000s:*
- 4: geneseqp2001s:*
- 5: geneseqp2002s:*
- 6: geneseqp2003as:*
- 7: geneseqp2003bs:*
- 8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	5	ABG94357 Modified
2	211	100.0	117	5	ABG80669 Human pri
3	211	100.0	117	7	ADD24196 Modified
4	211	100.0	124	5	ABG94340 Mouse mpr
5	211	100.0	124	5	ABG80652 Mouse trn
6	211	100.0	124	7	ADD24200 mpr-pr-BK-
7	211	100.0	142	7	AAW17686 Prion pro
8	211	100.0	163	7	ADB63859 Human pro
9	211	100.0	200	5	ABG31907 Human pri
10	211	100.0	208	3	ABG07316 Human pri
11	211	100.0	208	3	ABG07327 Mouse pri
12	211	100.0	208	3	ABG07329 Human pri
13	211	100.0	208	5	ABG31902 Human pri
14	211	100.0	208	5	ABG31904 Chimera-t
15	211	100.0	208	7	ADJ66133 Mouse pri
16	211	100.0	209	5	ABG31905 HCV type
17	211	100.0	211	4	ABG30801 Amino aci
18	211	100.0	225	6	ABR42793 Rat prion
19	211	100.0	226	7	ADB85240 Monkey pr
20	211	100.0	245	4	AAW72342 Cercopit
21	211	100.0	245	4	AAW72352 Human pri
22	211	100.0	253	2	AAW69660 Human pri
23	211	100.0	253	2	AAW85901 Human pri
24	211	100.0	253	2	AAW85901 Human pri
25	211	100.0	253	2	AAW85901 Human pri

26	211	100.0	253	2	AAW07994 Human pri
27	211	100.0	253	3	AAW81485 Human pri
28	211	100.0	253	3	AAW06272 Human pri
29	211	100.0	253	3	AAW15035 Human pri
30	211	100.0	253	4	AAW72339 Chimpanze
31	211	100.0	253	4	AAW72347 Prion pro
32	211	100.0	253	4	AAW72353 Guezeza p
33	211	100.0	253	4	AAW72344 Rhesus mo
34	211	100.0	253	4	AAW72345 Gibbon pr
35	211	100.0	253	4	AAW72350 Marmoset
36	211	100.0	253	4	AAW72351 Hamadryas
37	211	100.0	253	4	AAW72348 Prion pro
38	211	100.0	253	4	AAW72356 Stiamang p
39	211	100.0	253	4	AAW72346 Prion pro
40	211	100.0	253	4	AAW72355 Prion pro
41	211	100.0	253	4	AAW72349 Prion pro
42	211	100.0	253	4	AAW72340 Orangutan
43	211	100.0	253	4	AAW72338 Human pri
44	211	100.0	253	4	AAW72354 Capuchin
45	211	100.0	253	4	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytotoxic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
XX Homo sapiens.
OS
XX
XX WO200256905-A2.
XX
XX 25-JUL-2002.
XX
XX 21-JAN-2002; 2002WO-1B000166.
XX
XX 19-JAN-2001; 2001US-0262379P.
XX 04-MAY-2001; 2001US-0288549P.
XX 05-OCT-2001; 2001US-0326998P.
XX 07-NOV-2001; 2001US-0331045P.
XX
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
PI Ploossek C;
XX
XX WPI; 2002-627351/67.
XX
XX Molecular antigen array used in the production of vaccines for infectious
XX diseases.
XX
XX Disclosure; Page 441; 441pp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
XX used in the production of vaccines for infectious diseases. The invention
XX also discloses a composition comprising a non-natural molecular scaffold
XX comprising a core particle selected from a core particle of a non-natural
XX origin and a core particle of natural origin and an organiser comprising
XX at least one first attachment site, where the organiser is connected to
XX the core particle by at least one covalent bond. Also disclosed is an
XX antigen or antigenic determinant with at least one second attachment
XX site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β beta coat proteins
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 SQ Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTTTGTGNETETDVGMERVVEQ 40
 DB 52 NNFVHDCVNITTKQHTVTTTGTGNETETDVGMERVVEQ 91

RESULT 2
 ABG80669 standard; protein; 117 AA.

AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)

XX Human prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutant;
 KW graft versus host disease; Igs-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KW enterokinase; cysteine-containing linker.

OS Homo sapiens.
 OS Synthetic.

XX WO200256907-A2.

PD 25-JUL-2002.

XX 21-JAN-2002; 2002WO-IB000168.

PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-028549P.
 PR 05-OCT-2001; 2001US-032698P.
 PR 07-NOV-2001; 2001US-0331045P.

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (MAUR-) NOVARTIS PHARMA AG.
 PA (MAUR-) MAURER P.
 PA (LECH-) LECHNER F.
 PA (ORTM-) ORTMANN R.
 PA (LUBO-) LUBOEND R.
 PA (STAU-) STAUFENBIEL M.
 PA (FREY-) FREY P.

PI Maurer P, Lechner F, Ortmann R, Luboend R, Staufenbiel M, Frey P;

PI Renner WA, Bachmann M, Tisot A, Sebbel P, Ploesek C;
 XX WPI; 2002-66514/68.

PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.

PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organizer comprising at least one first attachment
 CC site, where the organizer is connected to the core particle by at least
 CC one second attachment site; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached with the scaffold (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, Igs-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune disease, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 XX protein)

SQ Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTTTGTGNETETDVGMERVVEQ 40
 DB 52 NNFVHDCVNITTKQHTVTTTGTGNETETDVGMERVVEQ 91

RESULT 3
 ID ADD24196 standard; protein; 117 AA.

XX ADD24196;

DT 15-JAN-2004 (first entry)

XX Modified human prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mutin.

OS Synthetic.
 OS prion.

PN WO2003059386-A2.

XX

PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pellacchioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 XX
 XX This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (Prp)
 CC or its dimer, or a Prp peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (Prp) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 211; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
 Db 52 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 91
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KM vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-IB000166.
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Sebbel P;
 PI Ploesek C;
 XX
 DR WPI; 2002-627351/67.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS Disclosure; Page 438; 441pp; English.
 XX
 XX This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytosolic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 211; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 40
 Db 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKKMERVVEQ 92
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; A β 1-42; influenza; muten;
 KM graft versus host disease; Ige-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 OS
 XX

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002MO-IB000168.
 PF 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR) MAURER P.
 PA (LECH) LECHNER F.
 PA (ORTM) ORTMANN R.
 PA (LUBO) LUBROEND R.
 PA (STRAU) STRAUENBIEL M.
 PA (FREY) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Luegend R, Straufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tisect A, Seibel P, Ploseek C;
 XX
 DR WPI; 2002-636514/68.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7; Page 415; 418pp; English.
 XX
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an antigen or antigenic determinant with at least
 CC one attachment site; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC attached to the scaffold by at least one covalent bond; (c) an antigen or
 CC antigenic determinant with at least one attachment site; and (1) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angiodysplasia, immunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 211; DB 5; Length 124;
 Db Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFDVHCNVTIKQHTVTTTGGENTFTDVGMMERVVEQ 40
 Db 53 NNFDVHCNVTIKQHTVTTTGGENTFTDVGMMERVVEQ 92

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 XX 15-JAN-2004 (first entry)
 DT mPrP-EK-Fc* cleaved protein sequence.
 XX
 DE
 XX
 KM vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.
 XX
 OS Unidentified.
 OS prion.
 XX
 PN WO2003059386-A2.
 PD 24-JUL-2003.
 XX
 XX 17-JAN-2003; 2003MO-EP000460.
 PF 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 PI WPI; 2003-598483/56.
 DR
 XX
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 211; DB 7; Length 124;
 Db Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFDVHCNVTIKQHTVTTTGGENTFTDVGMMERVVEQ 40
 Db 53 NNFDVHCNVTIKQHTVTTTGGENTFTDVGMMERVVEQ 92
 RESULT 7
 AA017686
 ID AA017686 standard; peptide; 142 AA.
 XX
 AC AA017686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 XX scarpia; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jacob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 PN WO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96WO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jacob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 SQ Sequence 142 AA;
 QY
 Query Match 100.0%; Score 211; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 1.7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123
 RESULT 8
 ADB63859 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTR020055570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EPI308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Isogai T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S,
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 DR WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides; useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 PS Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotide and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 SQ Sequence 163 AA;
 QY
 Query Match 100.0%; Score 211; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 2e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122
 RESULT 9
 ABG31907 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related peptide #6.
 XX
 KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200261418-A1.
 XX
 PD 06-AUG-2002.
 XX

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XX 31-JAN-2002; 2002MO-JP000803.
XX
XX 31-JAN-2001; 2001JP-00024279.
XX
XX (TOHO) UNIV TOROKU.
XX
XX Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention.
XX
XX Sequence 200 AA;
SQ
Query Match 100.0%; Score 211; DB 5; Length 200;
Best Local Similarity 100.0%; Pred. No. 2.5e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY
1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
143 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 182
DB
RESULT 10
AAB07316
ID AAB07316 standard; protein; 208 AA.
XX
XX AAB07316;
AC
XX
XX 17-OCT-2000 (first entry)
DT
XX
XX Mouse prion protein sequence.
DE
XX
XX Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Mus sp.
OS
XX
XX Key Location/Qualifiers
XX Region 37..68
XX /note= "Repeat region consisting of tandem repeats of
XX Disulfide-bond 156..191
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX WO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunosassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of Transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease
XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX of PrP that is occluded when the PrP is in an aggregated state
XX
XX Sequence 208 AA;
SQ
Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY
1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
150 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 189
DB
RESULT 11
AAB07318
ID AAB07318 standard; protein; 208 AA.
XX
XX AAB07318;
AC
XX
XX 17-OCT-2000 (first entry)
DT
XX
XX Human prion protein sequence.
DE
XX
XX Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Homo sapiens.
OS
XX
XX Key Location/Qualifiers
XX Region 29..69
XX /note= "Repeat region consisting of tandem repeats of
XX Disulfide-bond 157..192
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX WO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunosassay for prion protein, used for the determination of

```

PT transmissible spongiform encephalopathies in bovines.
XX Disclosure; Page 43-44; 50pp; English.
PS
XX The present sequence is the human prion protein (Prp) sequence.
CC Conversion of the normal cellular form of Prp into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of Transmissible
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC this protein in body fluid or tissue samples may be measured by an assay
CC of the present invention, in which a Prp epitope is captured by an
CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
CC epitopes (AAB07320-B07326) are derived from the protease resistant core
CC of Prp that is occluded when the Prp is in an aggregated state
XX
SQ Sequence 208 AA;
Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1 NNFVHDCVNITIKQHTVTTTGGKGFETPDVKMERVVEQ 40
151 NNFVHDCVNITIKQHTVTTTGGKGFETPDVKMERVVEQ 190
RESULT 12
AAB07327 standard; protein; 208 AA.
XX
AC AAB07327;
XX
DT 17-OCT-2000 (first entry)
XX
DE Mouse prion protein sequence.
XX
KM Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; Prp.
XX
OS Mus sp.
XX
FH Key Location/Qualifiers
FT Region 37..68
FT /note= "Repeat region consisting of tandem repeats of
FT repeat unit: PHGGGWGQ (AAB07319)"
FT Disulfide-bond 156..191
FT Modified-site 208
FT /note= "C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
XX WO200029849-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000896.
XX
XX 17-NOV-1998; 98FI-00002480.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-399778/34.
XX
XX New immunoassay for prion protein, used for determination of
XX transmissible spongiform encephalopathies in mammals, comprises specific
XX capture antibody.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (Prp) sequence.

CC Conversion of the normal cellular form of Prp into an aggregated,
CC insoluble isoform is implicated in the pathogenesis of Transmissible
CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
CC this protein in body fluid or tissue samples may be measured by an assay
CC of the present invention, in which a Prp epitope is captured by an
CC antibody, which is then detected. The presence of Prp indicates TSE. Prp
CC epitopes (AAB07320-B07326) are derived from the protease resistant core
CC of Prp that is occluded when the Prp is in an aggregated state
XX
SQ Sequence 208 AA;
Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
1 NNFVHDCVNITIKQHTVTTTGGKGFETPDVKMERVVEQ 40
150 NNFVHDCVNITIKQHTVTTTGGKGFETPDVKMERVVEQ 189
RESULT 13
AAB07329 standard; protein; 208 AA.
XX
AC AAB07329;
XX
DT 17-OCT-2000 (first entry)
XX
DE Human prion protein sequence.
XX
KM Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; Prp.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT Region 29..69
FT /note= "Repeat region consisting of tandem repeats of
FT repeat unit: PHGGGWGQ (AAB07319)"
FT Disulfide-bond 157..192
FT Modified-site 208
FT /note= "C-terminal phospho-inositol glycolipid membrane
FT anchor (-GPI)"
XX
XX WO200029849-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000896.
XX
XX 17-NOV-1998; 98FI-00002480.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-399778/34.
XX
XX New immunoassay for prion protein, used for determination of
XX transmissible spongiform encephalopathies in mammals, comprises specific
XX capture antibody.
XX
XX Disclosure; Page 43-44; 50pp; English.
XX
XX The present sequence is the human prion protein (Prp) sequence.
XX Conversion of the normal cellular form of Prp into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of Transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 XX
 SQ Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 14
 ABG31902 standard; protein; 208 AA.

XX ABG31902;

XX 05-NOV-2002 (first entry)

XX Human prion protein related protein #2.

XX Prion; human; follicular dendritic cells; FDC; infection;
 XX blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.

XX Homo sapiens.

XX MO200261418-A1.

XX 08-AUG-2002.

XX 31-JAN-2002; 2002MO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

XX Kitamoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
 XX prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.

XX Disclosure; Page 49-50; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
 XX human prion disease infection factor in a sample by using abnormal prion
 XX protein sedimentation in non-human follicular dendritic cells (FDC) as
 XX indication. The method of the invention is useful for screening (non-)
 XX human prion disease infection factor, which is applicable in safety tests
 XX on drugs like blood preparations, foods and cosmetics, and for developing
 XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 XX disease (CJD). The method of the invention is simple and quick. The
 XX present sequence represents a human prion related protein of the
 XX invention

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

RESULT 15
 ABG31904
 ID ABG31904 standard; protein; 208 AA.

XX ABG31904;

XX 05-NOV-2002 (first entry)

XX Chimera-type prion protein #2.

XX Prion; follicular dendritic cells; FDC; infection; blood preparation;
 XX food; cosmetic; CJD; Creutzfeldt-Jacob disease.

XX Synthetic.

XX MO200261418-A1.

XX 08-AUG-2002.

XX 31-JAN-2002; 2002MO-JP000803.

XX 31-JAN-2001; 2001JP-00024279.

XX (TOHO) UNIV TOHOKU.

XX Kitamoto T, Miyoshi K, Mohri S;

XX WPI; 2002-619277/66.

XX Screening (non-)human prion disease infection factor based on abnormal
 XX prion protein sedimentation in non-human follicular dendritic cells as
 XX indication, applicable in safety test on e.g. drugs and cosmetics.

XX Claim 9; Page 55-57; 69pp; Japanese.

XX This invention relates to a novel method for screening human or non-
 XX human prion disease infection factor in a sample by using abnormal prion
 XX protein sedimentation in non-human follicular dendritic cells (FDC) as
 XX indication. The method of the invention is useful for screening (non-)
 XX human prion disease infection factor, which is applicable in safety tests
 XX on drugs like blood preparations, foods and cosmetics, and for developing
 XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
 XX disease (CJD). The method of the invention is simple and quick. The
 XX present sequence represents a chimeraic type prion related protein of the
 XX invention

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;
 Best Local Similarity 100.0%; Pred. No. 2.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 190

Search completed: December 3, 2004, 00:55:39
 Job time : 67.2295 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218

Perfect score: 211

Sequence: 1 NNFVHDCVNITTKQHTVTTTNGENFTEDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	226	2 A53892	prion-related prot
2	211	100.0	232	2 S71041	major prion protei
3	211	100.0	241	2 S71048	major prion protei
4	211	100.0	241	2 S71056	major prion protei
5	211	100.0	245	2 S71045	major prion protei
6	211	100.0	253	1 UJHU	major prion protei
7	211	100.0	253	2 I84423	major prion protei
8	211	100.0	253	2 S71055	major prion protei
9	211	100.0	253	2 S53635	prion protein - si
10	211	100.0	253	2 I37032	major prion protei
11	211	100.0	253	2 I61847	major prion protei
12	211	100.0	254	2 B34759	prion protein - ch
13	211	100.0	254	2 A34759	prion protein - ch
14	211	100.0	254	2 A23544	major prion protei
15	210	99.5	252	2 I61848	major prion protei
16	209	99.1	264	2 S37137	prion protein - gr
17	206	97.6	245	2 S53627	major prion protei
18	206	97.6	252	2 S53634	major prion protei
19	206	97.6	252	2 S53611	major prion protei
20	206	97.6	253	2 S53624	major prion protei
21	206	97.6	253	2 S53623	major prion protei
22	206	97.6	253	2 S53620	major prion protei
23	206	97.6	253	2 S53625	major prion protei
24	206	97.6	253	2 S53617	major prion protei
25	206	97.6	253	2 S53614	major prion protei
26	206	97.6	253	2 S53616	major prion protei
27	206	97.6	253	2 S53618	major prion protei
28	206	97.6	253	2 S53619	major prion protei
29	206	97.6	254	1 UJHYTH	major prion prp-sc

30	206	97.6	256	2 JU0268	major prion protei
31	206	97.6	257	2 A23545	major prion prp27-
32	206	97.6	264	2 A54330	major prion protei
33	205	97.2	256	2 S37149	prion protein - gp
34	205	97.2	256	2 A54281	major prion protei
35	205	97.2	260	2 S53629	major prion protei
36	203	96.2	257	2 JU01900	major prion protei
37	202	95.7	239	2 S53633	major prion protei
38	200	94.8	252	2 JU6175	prion protein - ra
39	200	28.9	267	1 UJCH	major prion protei
40	61	28.9	267	2 A37372	prion protein homo
41	61	28.9	273	2 A46280	prion protein - ch
42	58	27.5	139	2 H90004	hypothetical prote
43	57	27.0	853	2 T08162	amyloid precursor (
44	56	26.5	511	2 C69199	phenylalanine-tRNA
45	55	26.1	648	2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1

A53892
prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <L1A>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C:Superfamily: major prion protein

Query Match

Best Local Similarity 100.0%; Score 211; DB 2; Length 226;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITTKQHTVTTTNGENFTEDVKMERVVEQ 40

DB 145 NNFVHDCVNITTKQHTVTTTNGENFTEDVKMERVVEQ 184

RESULT 2

S71041
major prion protein - black-handed spider monkey (fragment)
C:Species: Ateles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71041; S53630
R:Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G474376
R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53630
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, 'R', 196-231 <SCH>
A:Cross-references: EMBL:U08309
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 226;

Best Local Similarity 100.0%; Pred. No. 8.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 157 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 196

RESULT 3

S71048

major prion protein - Calliobus moloch (fragment)

C/Species: Calliobus moloch

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71048; S53632

R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71048

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G4755

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53632

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08312

C/Suprafamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;

Best Local Similarity 100.0%; Pred. No. 9.2e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 4

S71056

major prion protein - mandrill (fragment)

C/Species: Papio sphinx, Mandrillus sphinx (mandrill)

C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71056; S53621

R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71056

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCW>

A/Cross-references: EMBL:U08303

C/Suprafamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
|||||

Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 5

S71045

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71045; S53628

R/Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71045

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G47434

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-10, 'U', 12-202, 'R', 204-239 <SCW>

A/Cross-references: EMBL:U08292

C/Suprafamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 9.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 204

RESULT 6

UOHU

major prion protein precursor - human

N/Alternate names: 11k amyloid protein; 27-30k sinajoglycoprotein; PrP 27-30; PrP 33-35C;

C/Species: Homo sapiens (man)

C/Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

C/Accession: A24173; A40372; A05017; S14078; I54322; I68597; I58135; I59184; I79633; I796

R.Kretschmar, H.A.; Stowring, L.E.; Westaway, D.; Studdiblane, W.H.; Prusiner, S.B.; Dec

DNA 5, 315-324, 1986

A/Title: Molecular cloning of a human prion protein cDNA.

A/Reference number: A24173; MUID:86300093; PMID:3755672

A/Accession: A24173

A/Molecule type: mRNA

A/Residues: 1-253 <KRE>

A/Cross-references: UNIPROT:P04156; GB:M1389; NID:G190467; PIDN:AA60182.1; PID:G190468

R.Puckett, C.; Concannon, P.; Casey, C.; Hood, L.

Am. J. Hum. Genet. 49, 320-329, 1991

A/Title: Genomic structure of the human prion protein gene.

A/Reference number: A40372; MUID:91328137; PMID:1678248

A/Accession: A40372

A/Status: not compared with conceptual translation

A/Molecule type: DNA

A/Residues: 1-80, 89-253 <PUC>

A/Cross-references: GB:X83416; NID:G47846; PIDN:CA58442.1; PID:G47847

A/Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be

R.Lilio, Y.C.-J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.

Science 233, 364-367, 1986

A/Reference number: A05017; MUID:66261778; PMID:3014653

A/Accession: A05017

A/Molecule type: mRNA

A/Residues: 8-117, 119-253 <LIA>

A/Cross-references: GB:P00015; NID:G220015; PIDN:BA00011.1; PID:G220016; GB:M13667; NID:

R.Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,

EMBO J. 10, 513-519, 1991

A/Title: Amyloid protein of Gerstmann-Strausner-Scheinker disease (Indiana kindred) is

A/Reference number: S14078; MUID:91160504; PMID:1672107

A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72, X', 74-76, 'XX', 79, 'XX', 83-86, 111-128, 'V', 130-150 <TAG>
R:Diédich, J.F.; Knopman, D.S.; Liet, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322, MUID:93250789, PMID:1363802
A:Accession: I54322
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83, 92-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: I68597
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutatic
A:Reference number: I58135, MUID:92140671, PMID:176177
A:Accession: I58135
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 51-91, 'PHGGMGQPHGGMGQPHGGMGQPHGGMGQPHGGMGQPHGGMGQ' <RE2>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AAB2134.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldgaer, D.; Swergold, G.D.; Wills, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, a
A:Reference number: I59184, MUID:92072400, PMID:1683708
A:Accession: I59184
A>Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID:
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRP
A:Cross-references: GDB:I20720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
F:1-23/Domain: signal sequence #status predicted <SIG>
F:23-23/Product: major prion protein #status predicted <MAT>
F:54-92/Region: 8-residue repeats (P-H-G-G-W-G-G)
F:1231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:179-214/Disulfide bonds: #status predicted
F:181,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

```

A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: UNIPROT:P40254; EMBL:U015163; NID:G595850; PIDN:AAA68635.1; PID:G595850
R:Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53622
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210,'R',212-253 <SCH>
A:Cross-references: EMBL:U08307
R:Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71054
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08307; NID:G474372; PIDN:AAC50095.1; PID:G474373
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENTFETDVKMERVVEQ 40
|||||
173 NNFVHDCVNITIKOHTVTTTGGENTFETDVKMERVVEQ 212

RESULT 8
S71055
major prion protein - pig-tailed macaque
C:Species: Macaca nemestrina (pig-tailed macaque)
C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
A:Accession: S71055; S53626
R:Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71055
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:AAC50094.1; PID:G474373
R:Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53626
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 8-210,'R',212-247 <SCW>
A:Cross-references: EMBL:U08306
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKOHTVTTTGGENTFETDVKMERVVEQ 40
|||||
173 NNFVHDCVNITIKOHTVTTTGGENTFETDVKMERVVEQ 212

RESULT 9
S53635
prion protein - siamang
C:Species: Hylobates syndactylus (siamang)
C:Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jul-2004
A:Accession: S53635
R:Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

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A>Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53615
 A/Status: nucleic acid sequence not shown; translation not shown
 A/Molecule type: DNA
 A/Residues: 1-253 <SCH>
 A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:9474374; PIDN:AA650096.1; PID:94743
 A/Note: the source was designated as Symphalangus syndactylus
 A/Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
 C/Superfamily: major prion protein

Query Match
 Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
 Pred. No. 9,7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 10

major prion protein precursor - gorilla
 C/Species: Gorilla gorilla (gorilla)
 C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
 C/Accession: J37032
 R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
 A/Reference number: 136907; MUID:95083661; PMID:7991600
 A/Accession: J37032
 A/Status: preliminary; translated from GB/EMBL/DBJ
 A/Molecule type: DNA
 A/Residues: 1-253 <RES>
 A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:9563208; PIDN:AAA68633.1; PID:95632
 C/Superfamily: major prion protein

Query Match
 Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
 Pred. No. 9,7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 11

major prion protein precursor - chimpanzee
 C/Species: Pan troglodytes (chimpanzee)
 C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
 C/Accession: J61847; S71060; S53615
 R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
 A/Reference number: 136907; MUID:95083661; PMID:7991600
 A/Accession: J61847
 A/Status: translated from GB/EMBL/DBJ
 A/Molecule type: DNA
 A/Residues: 1-253 <RES>
 A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:9609303; PIDN:AAA68632.1; PID:96093
 R/Schätzl, H.M.
 Submitted to the EMBL Data Library, April 1994
 A/Reference number: S71041
 A/Accession: S71060
 A/Molecule type: DNA
 A/Residues: 1-253 <SCH>
 A/Cross-references: EMBL:U08296; NID:9474350; PIDN:AA650085.1; PID:9474351
 R/Schätzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.R.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A/Title: Prion protein gene variation among primates.
 A/Reference number: S53614; MUID:95139066; PMID:7837269
 A/Accession: S53615

A/Status: nucleic acid sequence not shown
 A/Molecule type: DNA
 A/Residues: 1-210,'R',212-253 <SCH>
 A/Cross-references: EMBL:U08296
 C/Superfamily: major prion protein
 C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match
 Best Local Similarity 100.0%; Score 211; DB 2; Length 253;
 Pred. No. 9,7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 12

prion protein - golden hamster
 C/Species: Mesocricetus auratus (golden hamster)
 C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
 C/Accession: B34759
 R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
 Mol. Cell. Biol. 10, 1153-1163, 1990
 A/Title: Three hamster species with different scrapie incubation times and neuropathology
 A/Reference number: A34759; MUID:90158578; PMID:2406562
 A/Accession: B34759
 A/Status: preliminary
 A/Molecule type: DNA
 A/Residues: 1-254 <LOW>
 A/Cross-references: GB:M33959; NID:9191182; PIDN:AAA37014.1; PID:9191183
 C/Superfamily: major prion protein

Query Match
 Best Local Similarity 100.0%; Score 211; DB 2; Length 254;
 Pred. No. 9,7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 13

prion protein - Chinese hamster
 C/Species: Cricetus griseus (Chinese hamster)
 C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
 C/Accession: A34759
 R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
 Mol. Cell. Biol. 10, 1153-1163, 1990
 A/Title: Three hamster species with different scrapie incubation times and neuropathology
 A/Reference number: A34759; MUID:90158578; PMID:2406562
 A/Accession: A34759
 A/Status: preliminary
 A/Molecule type: DNA
 A/Residues: 1-254 <LOW>
 A/Cross-references: UNIPROT:Q60506; GB:M33958; NID:9191180; PIDN:AAA37013.1; PID:9387056
 C/Superfamily: major prion protein

Query Match
 Best Local Similarity 100.0%; Score 211; DB 2; Length 254;
 Pred. No. 9,7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 14

major prion protein precursor - mouse
 N/Alternate names: Prp; Scrapie prion
 C/Species: Mus musculus (house mouse)

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(Without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKKHTTTTGGKGFEDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt_02.*
1: uniprot_sprot.*
2: uniprot_trembl.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB ID	Description
1	211	100.0	232	1	P40246 ateles geof
2	211	100.0	238	1	P40246 ateles geof
3	211	100.0	238	1	P40246 ateles geof
4	211	100.0	238	1	P40246 ateles geof
5	211	100.0	240	2	P40246 ateles geof
6	211	100.0	241	1	P40246 ateles geof
7	211	100.0	241	1	P40246 ateles geof
8	211	100.0	245	1	P40246 ateles geof
9	211	100.0	246	1	P40246 ateles geof
10	211	100.0	246	1	P40246 ateles geof
11	211	100.0	246	1	P40246 ateles geof
12	211	100.0	246	1	P40246 ateles geof
13	211	100.0	246	1	P40246 ateles geof
14	211	100.0	248	2	P40246 ateles geof
15	211	100.0	252	1	P40246 ateles geof
16	211	100.0	252	1	P40246 ateles geof
17	211	100.0	253	1	P40246 ateles geof
18	211	100.0	253	1	P40246 ateles geof
19	211	100.0	253	1	P40246 ateles geof
20	211	100.0	253	1	P40246 ateles geof
21	211	100.0	253	1	P40246 ateles geof
22	211	100.0	253	1	P40246 ateles geof
23	211	100.0	253	1	P40246 ateles geof
24	211	100.0	253	1	P40246 ateles geof
25	211	100.0	253	1	P40246 ateles geof
26	211	100.0	253	2	P40246 ateles geof
27	211	100.0	253	2	P40246 ateles geof
28	211	100.0	253	2	P40246 ateles geof
29	211	100.0	253	2	P40246 ateles geof
30	211	100.0	253	2	P40246 ateles geof
31	211	100.0	254	1	P40246 ateles geof

32	211	100.0	254	1	P40246 ateles geof
33	211	100.0	254	1	P40246 ateles geof
34	211	100.0	254	1	P40246 ateles geof
35	211	100.0	254	1	P40246 ateles geof
36	211	100.0	254	2	P40246 ateles geof
37	211	100.0	254	2	P40246 ateles geof
38	211	100.0	254	2	P40246 ateles geof
39	211	100.0	254	2	P40246 ateles geof
40	211	100.0	254	2	P40246 ateles geof
41	211	100.0	254	2	P40246 ateles geof
42	210	99.5	248	2	P40246 ateles geof
43	210	99.5	248	2	P40246 ateles geof
44	210	99.5	260	1	P40246 ateles geof
45	209	99.1	215	2	P40246 ateles geof

ALIGNMENTS

RESULT 1
ID PRIOR_ATEGE STANDARD; PRT; 232 AA.
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUN-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Ateles geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC EMBL: U08309; AAC50097.1; -
CC PIR: S71041; S71041.
CC HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15 By similarity.
FT CHAIN 16 214 Major prion protein.
FT PROPEP 215 >232 Removed in mature form (By similarity).
FT LIPID 214 214 GPI-anchor amidated serine (By similarity).

```

FT DISULFID 163 198 By similarity.
FT CARBOHYD 165 165 N-linked (GlcNAc...) (potential).
FT CARBOHYD 181 181 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 84 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 51 0.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT NON TER 232 232 4.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 211; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 3.5e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 157 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 196

RESULT 2
PRIO CERAT STANDARD; PRT; 238 AA.
ID PRIO CERAT 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercocebus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
NCBI_Taxid=36222, 9546;
RX [1]
RN SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
EMBL: U75384; AAB50623.1; -
EMBL: U75382; AAB50623.1; -
HSSP: P23907; IG04.
InterPro: IPR000817; Prion.
Pfam: PF00377; Prion; 1.
PRINTS: PR00341; PRION.
PROSITE: PS00291; PRION_1; 1.
PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

```

```

FT NON TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 215 Removed in mature form (by similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT DISULFID 164 199 similarity).
FT CARBOHYD 166 166 By similarity.
FT CARBOHYD 182 182 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3E331B CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
DB 158 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 197

RESULT 3
PRIO THEGE STANDARD; PRT; 238 AA.
ID PRIO THEGE 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Creniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
NCBI_Taxid=9565;
RX [1]
RN SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion."
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "folds".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC use by non-profit institutions as long as its content is in no way
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
EMBL: U75383; AAB50630.1; -
HSSP: P23907; IG04.
InterPro: IPR000817; Prion.
Pfam: PF00377; Prion; 1.
PRINTS: PR00341; PRION.
PROSITE: PS00291; PRION_1; 1.
PROSITE: PS00706; PRION_2; 1.

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DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
FT SIGNAL.
FT NON_TER
FT SIGNAL.
FT CHAIN
FT PROPEP
FT DISULFID
FT LIPID
FT CARBOHYD
FT CARBOHYD
FT DOMAIN
FT REPEAT
FT REPEAT
FT REPEAT
FT REPEAT
FT NON_TER
SQ SEQUENCE
  238 AA; 26104 MW; 5F59BF6022435DB CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 1; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 4
Q86XR1 PRELIMINARY; PRT; 238 AA.
AC Q86XR1;
DT 01-JUN-2003 (Tremblrel. 24, Created)
DT 01-JUN-2003 (Tremblrel. 24, Last sequence update)
DT 01-MAR-2004 (Tremblrel. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JMN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AAC83635.1;
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE
  238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 238;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 5
Q8VHV4 PRELIMINARY; PRT; 240 AA.
ID Q8VHV4
AC Q8VHV4;

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DT 01-MAR-2002 (Tremblrel. 20, Created)
DT 01-MAR-2002 (Tremblrel. 20, Last sequence update)
DT 01-JUN-2003 (Tremblrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OC NCBI_TaxID=29092;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AAL57232.1;
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE
  240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match
Best Local Similarity 100.0%; Score 211; DB 2; Length 240;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 6
PRIO_CALMO STANDARD; PRT; 241 AA.
ID PRIO_CALMO
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Callithecus moloch (Dukey titi).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callithecinae;
OC Callithecus.
OC NCBI_TaxID=9523;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "fibrils".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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DR EMBL; U08312; AAC50100.1; -
 DR PIR; S71048; S71048.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion; Octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.

FT NON TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 >241 Removed in mature form (By similarity).
 FT DISULFD 172 207 By similarity.
 FT LIPID 223 223 GPI-anchor amidated serine (By
 FT similarity).
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON TER 241 241
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013E7CAEC93 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3.7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFHDCVNTIKQHTVTTTKGNTETDVKKMERVVEQ 40
 DB 166 NNPFHDCVNTIKQHTVTTTKGNTETDVKKMERVVEQ 205

RESULT 7
 ID PRIO_MANSP STANDARD; PRT; 241 AA.
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandillus sphinx (Mandill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandillinae.
 OX NCBI_TaxID=9561;
 [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Scharfz H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISASES: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.

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DR EMBL; U08303; AAC50091.1; -
 DR PIR; S71056; S71056.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion; Octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

FT NON TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 223 Major prion protein.
 FT PROPEP 224 >241 Removed in mature form (By similarity).
 FT LIPID 223 223 GPI-anchor amidated serine (By
 FT similarity).
 FT DISULFD 172 207 By similarity.
 FT CARBOHYD 174 174 N-linked (GlcNAc...) (Potential).
 FT CARBOHYD 190 190 N-linked (GlcNAc...) (Potential).
 FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON TER 241 241
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 3.7e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFHDCVNTIKQHTVTTTKGNTETDVKKMERVVEQ 40
 DB 166 NNPFHDCVNTIKQHTVTTTKGNTETDVKKMERVVEQ 205

RESULT 8
 ID PRIO_CERAE STANDARD; PRT; 245 AA.
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
 GN Name=PRNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecoidea.
 OX NCBI_TaxID=9534, 36224;
 [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Scharfz H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

```

CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      or send an email to license@ebi.ac.uk).
CC      -----
CC      DR      EMBL; U08291; AAC50080.1; -.
CC      DR      EMBL; U08292; AAC50081.1; -.
CC      DR      PIR; S53627; S53627.
CC      DR      PIR; S71045; S71045.
CC      DR      HSSP; P23907; IG04.
CC      DR      InterPro; IPR000817; Prion.
CC      DR      Pfam; PF00377; Prion; 1.
CC      DR      Pfam; PF03991; Prion octapep; 5.
CC      DR      PRINTS; PR00341; PRION.
CC      DR      PROSITE; PS00291; PRION_1; 1.
CC      DR      PROSITE; PS00706; PRION_2; 1.
CC      KW      Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC      FT      SIGNAL 1 22
CC      FT      CHAIN 23 222
CC      FT      PROPEP 223 245
CC      FT      LIPID 222 222
CC      FT      DISULFID 171 206
CC      FT      CARBOHYD 173 173
CC      FT      CARBOHYD 189 189
CC      FT      DOMAIN 51 83
CC      FT      REPEAT 51 59
CC      FT      REPEAT 60 67
CC      FT      REPEAT 68 75
CC      FT      REPEAT 76 83
CC      FT      SEQUENCE 245 AA; D582B58E2726C99A CRC64;
CC      SO      Query Match 100.0%; Score 211; DB 1; Length 245;
CC      Best Local Similarity 100.0%; Pred. No. 3.7e-19;
CC      Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
CC      QY      1 NNFVHDCVNITIKOHTVTTTIGENFTETDVAMMERVVEQ 40
CC      Db      165 NNFVHDCVNITIKOHTVTTTIGENFTETDVAMMERVVEQ 204
CC      -----
CC      RESULT 9
CC      PRIO_CERMO STANDARD; PRT; 246 AA.
CC      ID PRIO CERMO
CC      AC P61761; Q95172; Q95173;
CC      DT 01-NOV-1997 (Rel. 35, Created)
CC      DT 01-NOV-1997 (Rel. 35, Last sequence update)
CC      DT 03-JUL-2004 (Rel. 44, Last annotation update)
CC      DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
CC      GN Name=PRNP;
CC      OS Cercopithecus mona (Mona monkey).
CC      OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
CC      OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC      OC Cercopithecinae; Cercopithecus.
CC      OC NCBI_TaxID=36226;
CC      RN [1]
CC      RP SEQUENCE FROM N.A.
CC      RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
CC      RT "Evidence for an increased substitution rate of the hominoid prion
CC      protein gene during the period of brain expansion."

```

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CC CC Submitted (NOV-1996) to the EMBL/GenBank/DBS databases.
CC CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC CC -1- host genome and is expressed both in normal and infected cells.
CC CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC CC "rode".
CC CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC CC animals infected with the degenerative neurological diseases kuru,
CC CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC CC transmissible mink encephalopathy (TME), etc.
CC CC -1- SIMILARITY: Belongs to the prion family.
CC CC -----
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CC CC modified and this statement is not removed. Usage by and for commercial
CC CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC CC or send an email to license@isb-sib.ch).
CC CC -----
CC CC EMBL; U75386; AAB50625.1; -.
CC CC DR HSSP; P23907; IG04.
CC CC DR InterPro; IPR000817; Prion.
CC CC DR Pfam; PF00377; Prion; 1.
CC CC DR Pfam; PF03991; Prion octapep; 6.
CC CC DR PRINTS; PR00341; PRION.
CC CC DR PROSITE; PS00291; PRION_1; 1.
CC CC DR PROSITE; PS00706; PRION_2; 1.
CC CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC CC FT NON TER 1 1
CC CC FT SIGNAL 1 15 By similarity.
CC CC FT CHAIN 16 223 Major prion protein.
CC CC FT PROPEP 224 246 Removed in mature form (By similarity).
CC CC FT LIPID 223 223 GPI-anchor amidated serine (By
CC CC similarity).
CC CC FT DISULFID 172 207 By similarity.
CC CC FT CARBOHYD 174 174 N-linked (GlcNAc...)(Potential).
CC CC FT CARBOHYD 190 190 N-linked (GlcNAc...)(Potential).
CC CC FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-
CC CC Q.
CC CC FT REPEAT 44 52
CC CC FT REPEAT 53 60 1.
CC CC FT REPEAT 61 68 2.
CC CC FT REPEAT 69 76 3.
CC CC FT REPEAT 77 84 4.
CC CC FT REPEAT 84 84 5.
CC CC SQ SEQUENCE 246 AA; 26900 MW; 835DI47CA2BAFDD3 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3, Be-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0

Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 40
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 205

RESULT 10
PRIO_CERNE STANDARD: PRT; 246 AA.
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35. Created)
DT 01-NOV-1997 (Rel. 35. Last sequence update)
DT 05-JUL-2004 (Rel. 44. Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (P-Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (De Brazza's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
OC Cercopithecinae; Cercopithecus.
OC
OX NCBI_TaxID=36227;
RN [1]
RP SEQUENCE FROM N.A.

```

RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
 CC -----
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 CC
 CC -----
 CC DR EMBL; U75387; AAB50626.1; -
 CC DR HSSP; P23907; IG04
 CC DR InterPro: IPR000817; Prion.
 CC DR Pfam; PF00397; Prion; 1.
 CC DR Pfam; PF03991; Prion octapep; 6.
 CC DR PRINTS; PR00341; PRION.
 CC DR PROSITE; PS00291; PRION 1; 1.
 CC DR PROSITE; PS00706; PRION 2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL 1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 CC
 CC Query Match 100.0%; Score 211; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFVHDCVNIITIKQHTVTTTNGENFTETDVKMERVVEQ 40
 CC Db 166 NNFVHDCVNIITIKQHTVTTTNGENFTETDVKMERVVEQ 205
 CC
 CC RESULT 11
 CC PRTIO CERTO STANDARD; PRT; 246 AA.
 CC AC 095176;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrNP;
 CC OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 CC OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecinae; Cercopithecus.

OX NCBI_TaxID=9531;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuyt A.C., Dekker J.T., Goudamit J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RL protein gene during the period of brain expansion."
 CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC
 CC -1- SIMILARITY: Belongs to the prion family.
 CC
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 CC
 CC -----
 CC DR EMBL; U75385; AAB50628.1; -
 CC DR HSSP; P23907; IG04
 CC DR InterPro: IPR000817; Prion.
 CC DR Pfam; PF00397; Prion; 1.
 CC DR Pfam; PF03991; Prion octapep; 6.
 CC DR PRINTS; PR00341; PRION.
 CC DR PROSITE; PS00291; PRION 1; 1.
 CC DR PROSITE; PS00706; PRION 2; 1.
 CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 CC FT NON TER 1 1
 CC FT SIGNAL 1 15
 CC FT CHAIN 16 223
 CC FT PROPEP 224 246
 CC FT LIPID 223 223
 CC FT DISULFID 172 207
 CC FT CARBOHYD 174 174
 CC FT CARBOHYD 190 190
 CC FT DOMAIN 44 84
 CC FT REPEAT 44 52
 CC FT REPEAT 53 60
 CC FT REPEAT 61 68
 CC FT REPEAT 69 76
 CC FT REPEAT 77 84
 CC SQ SEQUENCE 246 AA; 26914 MW; F58679CBBC5ADCT CRC64;
 CC
 CC Query Match 100.0%; Score 211; DB 1; Length 246;
 CC Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC 1 NNFVHDCVNIITIKQHTVTTTNGENFTETDVKMERVVEQ 40
 CC Db 166 NNFVHDCVNIITIKQHTVTTTNGENFTETDVKMERVVEQ 205
 CC
 CC RESULT 12
 CC PRTIO ERYPA STANDARD; PRT; 246 AA.
 CC AC 095174;
 CC DT 01-NOV-1997 (Rel. 35, Created)
 CC DT 01-NOV-1997 (Rel. 35, Last sequence update)
 CC DT 05-JUL-2004 (Rel. 44, Last annotation update)
 CC DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 CC GN Name=PrNP;
 CC OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 CC Cercopithecoidea; Erythrocebus.
 CC NCBI_TaxID=9538;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA van der Kuy A.C., Dekker J.T., Goudemits J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 RT protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "fibrils".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----

CC EMBL: U75388; AAB50627.1; -;
 CC HSSP: P23907; 1G04.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT FT SIGNAL 1
 FT CHAIN 16
 FT PROPEP 224
 FT LIPID 223
 FT DISULFID 172
 FT CARBOHYD 174
 FT CARBOHYD 190
 FT DOMAIN 44
 FT REPEAT 44
 FT REPEAT 53
 FT REPEAT 61
 FT REPEAT 76
 FT REPEAT 77
 SQ SEQUENCE 246 AA; 26866 MW; D35D105BEC53108 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETEDVKMERVVEQ 40
 DB 166 NNFFVHDCVNITIKOHTVTTTGGKGFETEDVKMERVVEQ 205

RESULT 13
 ID AA083636 PRELIMINARY; PRT; 246 AA.
 AC AA083636;
 DT 02-MAR-2004 (TREMBlrel. 27, Created)
 DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
 DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 CC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 CC EMBL: AY219883; AA083636.1; -;
 CC Prion.
 FT FT NON_TER 1
 FT NON_TER 246
 SQ SEQUENCE 246 AA; 26864 MW; 309B1B13C8841566 CRC64;

Query Match 100.0%; Score 211; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETEDVKMERVVEQ 40
 DB 166 NNFFVHDCVNITIKOHTVTTTGGKGFETEDVKMERVVEQ 205

RESULT 14
 ID Q8VHV5 PRELIMINARY; PRT; 248 AA.
 AC Q8VHV5;
 DT 01-MAR-2002 (TREMBlrel. 20, Created)
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Clethrionomys glareolus (Bank vole).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 CC Clethrionomys.
 CC NCBI_TaxID=51090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Mindi O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC EMBL: AF367624; AA57231.1; -;
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC Pfam: PF03991; Prion octapep; 6.
 CC PRINTS: PR00341; PRION.
 CC SMART: SM00157; PrP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion.
 FT FT NON_TER 248
 FT NON_TER 248
 SQ SEQUENCE 248 AA; 27259 MW; 815B64BCD2773C2C CRC64;

Query Match 100.0%; Score 211; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFFVHDCVNITIKOHTVTTTGGKGFETEDVKMERVVEQ 40
 DB 173 NNFFVHDCVNITIKOHTVTTTGGKGFETEDVKMERVVEQ 212

RESULT 15
 ID PRIO_CALJA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUL-2004 (rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (PrP33-35C).
GN Name=PRNP;
OS Calittrix jaccus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrix.
NCBI_taxid=9483;
RN (1)
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08304; AAC50092.1; -
DR PIR; S53634; S53634.
DR HSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion, 1.
DR Pfam; PF03991; Prion, octapep, 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT REPEAT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27639 MW; B2800B60FD5CE664 CRC64;
Query Match 100.0%; Score 211; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 3.9e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNTTKOHTVTTTGKENTFEDVQMERVVEQ 40
DB 172 NNFVHDCVNTTKOHTVTTTGKENTFEDVQMERVVEQ 211

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218

Perfect score: 211
Sequence: 1 NNPFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapco 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA:*
1: /cgn2_6/ptodata/1/iaa/5A.COMB.pep.*
2: /cgn2_6/ptodata/1/iaa/5B.COMB.pep.*
3: /cgn2_6/ptodata/1/iaa/6A.COMB.pep.*
4: /cgn2_6/ptodata/1/iaa/6B.COMB.pep.*
5: /cgn2_6/ptodata/1/iaa/PCTUS.COMB.pep.*
6: /cgn2_6/ptodata/1/iaa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	142	1 US-08-556-823-10	Sequence 10, Appl
2	211	100.0	245	4 US-09-431-887-5	Sequence 5, Appl
3	211	100.0	245	4 US-09-431-887-15	Sequence 15, Appl
4	211	100.0	252	4 US-09-431-887-13	Sequence 13, Appl
5	211	100.0	252	4 US-09-431-887-17	Sequence 17, Appl
6	211	100.0	253	1 US-08-242-188-2	Sequence 2, Appl
7	211	100.0	253	1 US-08-509-261A-2	Sequence 2, Appl
8	211	100.0	253	1 US-08-660-626-8	Sequence 8, Appl
9	211	100.0	253	1 US-08-692-892-2	Sequence 2, Appl
10	211	100.0	253	2 US-08-713-939A-2	Sequence 2, Appl
11	211	100.0	253	2 US-08-868-162A-22	Sequence 22, Appl
12	211	100.0	253	3 US-09-031-168-8	Sequence 20, Appl
13	211	100.0	253	3 US-09-128-450-20	Sequence 2, Appl
14	211	100.0	253	3 US-09-036-579-2	Sequence 2, Appl
15	211	100.0	253	3 US-09-823-49A-20	Sequence 20, Appl
16	211	100.0	253	3 US-09-550-374-2	Sequence 2, Appl
17	211	100.0	253	4 US-09-431-887-1	Sequence 1, Appl
18	211	100.0	253	4 US-09-431-887-2	Sequence 2, Appl
19	211	100.0	253	4 US-09-431-887-3	Sequence 3, Appl
20	211	100.0	253	4 US-09-431-887-4	Sequence 4, Appl
21	211	100.0	253	4 US-09-431-887-7	Sequence 7, Appl
22	211	100.0	253	4 US-09-431-887-8	Sequence 8, Appl
23	211	100.0	253	4 US-09-431-887-9	Sequence 9, Appl
24	211	100.0	253	4 US-09-431-887-10	Sequence 10, Appl
25	211	100.0	253	4 US-09-431-887-11	Sequence 11, Appl
26	211	100.0	253	4 US-09-431-887-12	Sequence 12, Appl
27	211	100.0	253	4 US-09-431-887-14	Sequence 14, Appl

28	211	100.0	253	4 US-09-431-887-16	Sequence 16, Appl
29	211	100.0	253	4 US-09-431-887-18	Sequence 18, Appl
30	211	100.0	253	4 US-09-431-887-19	Sequence 19, Appl
31	211	100.0	253	4 US-09-943-906-2	Sequence 2, Appl
32	211	100.0	253	4 US-09-669-516C-8	Sequence 8, Appl
33	211	100.0	253	4 US-09-919-172-57	Sequence 57, Appl
34	211	100.0	253	4 US-09-976-594-72	Sequence 72, Appl
35	211	100.0	253	4 US-09-904-987-3	Sequence 3, Appl
36	211	100.0	254	1 US-08-242-188-1	Sequence 1, Appl
37	211	100.0	254	1 US-08-509-261A-1	Sequence 1, Appl
38	211	100.0	254	1 US-08-660-626-7	Sequence 7, Appl
39	211	100.0	254	1 US-08-692-892-1	Sequence 1, Appl
40	211	100.0	254	2 US-08-713-939A-1	Sequence 21, Appl
41	211	100.0	254	2 US-08-868-162A-21	Sequence 7, Appl
42	211	100.0	254	3 US-09-031-168-7	Sequence 19, Appl
43	211	100.0	254	3 US-09-128-450-19	Sequence 28, Appl
44	211	100.0	254	3 US-09-128-450-28	Sequence 1, Appl
45	211	100.0	254	3 US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10

; Sequence 10, Application US/08556823
; Patent No. 5750361

; GENERAL INFORMATION:

; APPLICANT: Stanley B. Prusiner

; APPLICANT: Kiyotoshi Kaneko

; APPLICANT: Fred E. Cohen

; TITLE OF INVENTION: Formation and use of prion protein

; NUMBER OF SEQUENCES: 10

; CORRESPONDENCE ADDRESS:

; ADDRESSER: Fish & Richardson

; STREET: 2200 Sand Hill Road, Suite 100

; CITY: Menlo Park

; STATE: California

; COUNTRY: USA

; ZIP: 94025

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: Ascii

; CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/08/556,823

; FILING DATE:

; CLASSIFICATION: 530

; ATTORNEY/AGENT INFORMATION:

; NAME: Valetta Gregg

; REGISTRATION NUMBER: 35,127

; REFERENCE/DOCKET NUMBER: 07532/003001

; TELECOMMUNICATION INFORMATION:

; TELEPHONE: (415) 322-5070

; TELEFAX: (415) 854-0875

; INFORMATION FOR SEQ ID NO: 10:

; SEQUENCE CHARACTERISTICS:

; LENGTH: 142 amino acids

; TYPE: amino acid

; TOPOLOGY: linear

; MOLECULE TYPE: peptide

; US-08-556-823-10

Query Match 100.0%; Score 211; DB 1; Length 142;

Best Local Similarity 100.0%; Pred. No. 3.2e-22; Indels 0; Gaps 0;

Matches 40; Conservative 0; Mismatches 0;

Qy 1 NNPFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40

Db 84 NNPFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 123

RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 204

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

Query Match 100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
DB 165 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 204

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 211

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

Query Match 100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 40
DB 172 NNFVHDCVNITIKOHTVTTTGGNFETEDVGMERVEQ 211

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 556186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bosicovic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

FILING DATE: 13-MAY-1994
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Bozicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 06510/014001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 854-5277
 TELEFAX: (415) 854-0875
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 ORIGINAL SOURCE:
 ORGANISM: HUMAN PRION PROTEIN, HuPrP
 US-08-242-188-2

 Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 1 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 DB 173 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

 RESULT 7
 US-08-509-261A-2
 Sequence 2, Application US/08509261A
 Patent No. 5763244
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Telling, Glenn
 TITLE OF INVENTION: Method of Detecting Prions
 TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
 NUMBER OF SEQUENCES: 4
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Bozicevic & Reed, LLP
 STREET: 285 Hamilton Avenue, Suite 200
 CITY: Palo Alto
 STATE: CA
 COUNTRY: USA
 ZIP: 94301
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastSeq for Windows Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/509,261A
 FILING DATE: 31-JUL-1995
 CLASSIFICATION: 800
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Bozicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 6510-030001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650-327-3400
 TELEFAX: 650-327-3231
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear

US-08-509-261A-2
 Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 1 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 DB 173 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

 RESULT 8
 US-08-660-626-8
 Sequence 8, Application US/08660626
 Patent No. 5789655
 GENERAL INFORMATION:
 APPLICANT: Stanley B. Prusiner
 APPLICANT: Glenn C. Telling
 APPLICANT: Fred E. Cohen
 APPLICANT: Michael R. Scott
 TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
 TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
 NUMBER OF SEQUENCES: 13
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson
 STREET: 2200 Sand Hill Road, Suite 100
 CITY: Menlo Park
 STATE: California
 COUNTRY: USA
 ZIP: 94025
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Asciii
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/660,626
 FILING DATE:
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Valeta Gregg
 REGISTRATION NUMBER: 35,127
 REFERENCE/DOCKET NUMBER: 07532/003001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 322-5070
 TELEFAX: (415) 854-0875
 INFORMATION FOR SEQ ID NO: 8:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 ORIGINAL SOURCE:
 ORGANISM: HUMAN PRION PROTEIN, HuPrP
 US-08-660-626-8

 Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

 QY 1 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 DB 173 NNFFVDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

 RESULT 9
 US-08-692-892-2
 Sequence 2, Application US/08692892
 Patent No. 5792901
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSER: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPr
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSER: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

Query 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred B. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULE TYPE: linear
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 621149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 173 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 212

Query 1 NNFVHDCVNITIKQHTVTTTGGENTETDVKKMERVVEQ 40

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPLOGY: linear
MOLECULUS TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMERYVEQ 40
DB 173 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMERYVEQ 212

RESULT 15

US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610

GENERAL INFORMATION:

APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W

APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suseette

TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121

CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30

PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03

NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 20
LENGTH: 253

TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMERYVEQ 40
DB 173 NNPFVHDCVNITIKQHTVTTTGGNFETDVKMMERYVEQ 212

Search completed: December 3, 2004, 00:18:57
Job time: 15.1475 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-12_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNTTKQHTVTTTGTGENTFEDVKKMERVREQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356523098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubppaa/US07_PUBCOMB.pdp:*
- 2: /cgn2_6/ptodata/1/pubppaa/PCT_NEW_PUB.pdp:*
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- 12: /cgn2_6/ptodata/1/pubppaa/US10_PUBCOMB.pdp:*
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- 18: /cgn2_6/ptodata/1/pubppaa/US11_NEW_PUB.pdp:*
- 19: /cgn2_6/ptodata/1/pubppaa/US60_NEW_PUB.pdp:*
- 20: /cgn2_6/ptodata/1/pubppaa/US60_PUBCOMB.pdp:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	US-10-050-902-348	Sequence 348, App
2	211	100.0	117	US-10-050-998-348	Sequence 348, App
3	211	100.0	117	US-10-346-190-89	Sequence 89, Appl
4	211	100.0	124	US-10-050-902-324	Sequence 324, App
5	211	100.0	124	US-10-050-998-324	Sequence 324, App
6	211	100.0	124	US-10-346-190-93	Sequence 93, Appl
7	211	100.0	141	US-10-612-356A-1	Sequence 1, Appl
8	211	100.0	162	US-09-745-003-10	Sequence 10, Appl
9	211	100.0	163	US-10-104-047-2013	Sequence 2013, Ap
10	211	100.0	164	US-09-745-003-12	Sequence 12, Appl
11	211	100.0	200	US-10-470-848-10	Sequence 10, Appl
12	211	100.0	208	US-10-470-848-3	Sequence 3, Appl
13	211	100.0	208	US-10-745-393-1	Sequence 1, Appl

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, Appl
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, Appl
16	211	100.0	225	14	US-10-301-488A-25	Sequence 25, Appl
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, Appl
18	211	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, Appl
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, Appl
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, Appl
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, Appl
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, Appl
24	211	100.0	253	9	US-09-904-987-3	Sequence 3, Appl
25	211	100.0	253	9	US-09-919-172-57	Sequence 57, Appl
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, Appl
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, Appl
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, Appl
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, Appl
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, Appl
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, Appl
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, Appl
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, Appl
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, Appl
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, Appl
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, Appl
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, Appl
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, Appl
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, Appl
40	211	100.0	253	14	US-10-301-488A-21	Sequence 21, Appl
41	211	100.0	253	14	US-10-301-488A-22	Sequence 22, Appl
42	211	100.0	253	14	US-10-301-488A-32	Sequence 32, Appl
43	211	100.0	253	14	US-10-410-907A-8	Sequence 8, Appl
44	211	100.0	253	14	US-10-346-190-79	Sequence 79, Appl
45	211	100.0	253	14		

ALIGNMENTS

RESULT 1
US-10-050-902-348
Sequence 348, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebhel, Peter
APPLICANT: Plosek, Christine
TITLE OR INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 348
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE: Modified human prion protein fragment
OTHER INFORMATION: Modified human prion protein fragment
US-10-050-902-348
Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 40
Db 52 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 91

RESULT 2

US-10-050-898-348
; Sequence 348, Application US/10050898
; Publication No. US20030175711A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Piossek, Christine
; APPLICANT: Orlmann, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190003
; CURRENT FILING DATE: 2002-01-18
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 348
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match Best Local Similarity 100.0%; Score 211; DB 14; Length 117;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 40
Db 52 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 91

RESULT 3

US-10-346-190-89
; Sequence 89, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT FILING DATE: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20

; PRIOR APPLICATION NUMBER: PCT/IB02/00166

; PRIOR FILING DATE: 2002-01-21

; PRIOR APPLICATION NUMBER: 10/050,902

; PRIOR FILING DATE: 2002-01-18

; NUMBER OF SEQ ID NOS: 164

; SOFTWARE: PatentIn version 3.1

; SEQ ID NO 89

; LENGTH: 117

; TYPE: PRT

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match Best Local Similarity 100.0%; Score 211; DB 14; Length 117;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 40
Db 52 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 91

RESULT 4

US-10-050-902-324
; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Piossek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT FILING DATE: US/10/050,902
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrPc construct
US-10-050-902-324

Query Match Best Local Similarity 100.0%; Score 211; DB 14; Length 124;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 40
Db 53 NNPFVHDCVNTTKQHTVTTTGGNFETETDVKKMERVVEQ 92

RESULT 5

US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US20030175711A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin

APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staendiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
US-10-346-190-93
; Sequence 93, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Pilon Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/336,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 93
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 92

RESULT 7
US-10-612-356A-1
; Sequence 1, Application US/10612356A
; Publication No. US20040143093A1
; GENERAL INFORMATION:
; APPLICANT: Zahn, Ralph
; APPLICANT: Luhrs, Thorsten
; TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
; FILE REFERENCE: PUS-E005-111
; CURRENT APPLICATION NUMBER: US/10/612,356A
; CURRENT FILING DATE: 2003-07-02
; NUMBER OF SEQ ID NOS: 1
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 1
; LENGTH: 141
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 84 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 123

RESULT 8
US-09-745-003-10
; Sequence 10, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins, Related Reagents
; FILE REFERENCE: PrP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 10
; LENGTH: 162
; TYPE: PRT
; ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 82 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 121

RESULT 9
US-10-104-047-2013
; Sequence 2013, Application US/10104047
; Publication No. US20030236392A1
; GENERAL INFORMATION:
; APPLICANT: HELIX RESEARCH INSTITUTE
; TITLE OF INVENTION: No. US20030236392A1el full length cdna
; FILE REFERENCE: HI-A0105

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/ CURRENT APPLICATION NUMBER: US/10/104,047
/ CURRENT FILING DATE: 2002-03-25
/ PRIOR APPLICATION NUMBER:
/ PRIOR FILING DATE:
/ NUMBER OF SEQ ID NOS: 4096
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 2013
/ LENGTH: 163
/ TYPE: PRF
/ ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match          100.0%; Score 211; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 83 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 122

RESULT 10
US-09-745-003-12
/ Sequence 12, Application US/09745003
/ Patent No. US20020042122A1
/ GENERAL INFORMATION:
/ APPLICANT: Bazan, Fernando J
/ TITLE OF INVENTION: Human Proteins; Related Reagents
/ FILE REFERENCE: PRP2
/ CURRENT APPLICATION NUMBER: US/09/745,003
/ CURRENT FILING DATE: 2000-12-20
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 12
/ LENGTH: 164
/ TYPE: PRF
/ ORGANISM: rodent
US-09-745-003-12

Query Match          100.0%; Score 211; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 82 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 121

RESULT 11
US-10-470-848-10
/ Sequence 10, Application US/10470848
/ Publication No. US20040137421A1
/ GENERAL INFORMATION:
/ APPLICANT: President of Tohoku University
/ TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
/ FILE REFERENCE: PR-1224-PCT
/ CURRENT APPLICATION NUMBER: US/10/470,848
/ CURRENT FILING DATE: 2003-07-31
/ PRIOR APPLICATION NUMBER: JP 2001-24279
/ PRIOR FILING DATE: 2001-01-31
/ NUMBER OF SEQ ID NOS: 10
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 10
/ LENGTH: 200
/ TYPE: PRF
/ ORGANISM: Homo sapiens
US-10-470-848-10

Query Match          100.0%; Score 211; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 9,5e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
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DB 143 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 182

RESULT 12
US-10-470-848-3
/ Sequence 3, Application US/10470848
/ Publication No. US20040137421A1
/ GENERAL INFORMATION:
/ APPLICANT: President of Tohoku University
/ TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
/ FILE REFERENCE: PR-1224-PCT
/ CURRENT APPLICATION NUMBER: US/10/470,848
/ CURRENT FILING DATE: 2003-07-31
/ PRIOR APPLICATION NUMBER: JP 2001-24279
/ PRIOR FILING DATE: 2001-01-31
/ NUMBER OF SEQ ID NOS: 10
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 3
/ LENGTH: 208
/ TYPE: PRF
/ ORGANISM: Homo sapiens
US-10-470-848-3

Query Match          100.0%; Score 211; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 151 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 190

RESULT 13
US-10-745-393-1
/ Sequence 1, Application US/10745393
/ Publication No. US20040203131A1
/ GENERAL INFORMATION:
/ APPLICANT: Patz, Elke
/ APPLICANT: Scholz, Christian
/ APPLICANT: Stock, Werner
/ APPLICANT: Schatzschmidt, Peter
/ TITLE OF INVENTION: Complexes comprising a prion protein and pepcidyl prolyl isomerase
/ FILE REFERENCE: 12290 US3 (9793/141)
/ CURRENT APPLICATION NUMBER: US/10/745,393
/ CURRENT FILING DATE: 2003-12-23
/ PRIOR APPLICATION NUMBER: EP 0115225.3
/ PRIOR FILING DATE: 2001-06-22
/ PRIOR APPLICATION NUMBER: EP 01120939.2
/ PRIOR FILING DATE: 2001-08-31
/ PRIOR APPLICATION NUMBER: US 10/167,774
/ PRIOR FILING DATE: 2002-06-10
/ PRIOR APPLICATION NUMBER: US 10/179,905
/ PRIOR FILING DATE: 2002-06-24
/ NUMBER OF SEQ ID NOS: 3
/ SOFTWARE: PatentIn version 3.1
/ SEQ ID NO 1
/ LENGTH: 208
/ TYPE: PRF
/ ORGANISM: Homo sapiens
US-10-745-393-1

Query Match          100.0%; Score 211; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB 151 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 190

RESULT 14
```


US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv-type prion protein
US-10-470-848-6

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMERVVEQ 150

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match 100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMERVVEQ 150

Search completed: December 3, 2004, 01:07:46
Job time : 47.3443 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
Sequence: 1 NNQNNFVHDCVNTTKQHTV.....ENFTEDVQMERVQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04:*

1: geneseqp1980s:*\n2: geneseqp1990s:*\n3: geneseqp2000s:*\n4: geneseqp2001s:*\n5: geneseqp2002s:*\n6: geneseqp2003as:*\n7: geneseqp2003bs:*\n8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	246	100.0	254	4	AAB72360 Hamster p
2	246	100.0	254	7	ADE06737 Chinese h
3	246	100.0	254	7	ADE06736 Armenian
4	245	99.6	253	4	AAB72350 Marmoset
5	241	98.0	124	5	ABG94340 Mouse mpr
6	241	98.0	124	5	ABG80652 Mouse trn
7	241	98.0	124	5	ADD24200 mPrPc-BK-
8	241	98.0	208	3	AAB07316 Mouse pri
9	241	98.0	208	3	AAB07327 Mouse pri
10	241	98.0	208	5	ABG31904 Chimera-t
11	241	98.0	208	7	ADJ66133 Mouse pri
12	241	98.0	209	5	ABG31905 HCHV cype
13	241	98.0	211	4	AAB30801 Amno aci
14	241	98.0	225	6	ABR42793 Rat prion
15	241	98.0	226	6	ADB85240 Rat prion
16	241	98.0	254	2	AAR86714 Mouse pri
17	241	98.0	254	2	AAB69659 Mouse pri
18	241	98.0	254	2	AAB85900 Mouse pri
19	241	98.0	254	2	AAY07996 Murine pr
20	241	98.0	254	4	AAB61772 Mouse pri
21	241	98.0	254	4	AAB82118 Murine pr
22	241	98.0	254	4	AAB82111 Murine pr
23	241	98.0	254	4	AAB84522 Amno aci
24	241	98.0	254	4	AAG65852 Mouse pri
25	241	98.0	254	5	AAM50888 Mouse pri

26	241	98.0	254	5	ABP51786	Abp51786 Mouse pri
27	241	98.0	254	5	ABG31906	Abg31906 Mouse pri
28	241	98.0	254	5	ABR04427	Abbr04427 Murine pr
29	241	98.0	254	5	ABE15602	Aae15602 Mouse prp
30	241	98.0	254	5	ABE15609	Aae15609 Mouse prp
31	241	98.0	254	6	ABU58867	Abu58867 Mouse pri
32	241	98.0	254	6	ABE33226	Aae33226 Mouse prp
33	241	98.0	254	6	ABR42792	Abri42792 Mouse pri
34	241	98.0	254	7	ADC59531	Adc59531 Mouse pri
35	241	98.0	254	7	ADC52088	Adc52088 Mouse pri
36	241	98.0	254	7	ADD24194	Add24194 Mouse pri
37	241	98.0	254	7	ADB56264	Adbe56264 Rat prote
38	241	98.0	254	7	ADB06739	Adbe06739 Mouse pri
39	241	98.0	254	8	ADP47774	Adp47774 Mouse pri
40	241	98.0	254	8	ADH44558	Adh44558 Murine pr
41	241	98.0	254	8	ADK15538	Adk15538 Murine pr
42	241	98.0	254	8	ADJ92128	Adj92128 Mouse pri
43	241	98.0	255	4	AAB72357	Aab72358 Murine pr
44	241	98.0	255	4	AAB72358	Aab72358 Murine pr
45	241	98.0	255	5	ABG31903	Abg31903 Chimera-t

ALIGNMENTS

2	RESULT 1	
XX	AAB72360	176..221
XX	AAB72360	standard; peptide; 254 AA..
XX		
AC	AAB72360;	
DT	17-MAY-2001	(first entry)
XX		
DE	Hamster prion protein cellular form (PrPc) amino acid sequence.	
XX		
KM	Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;	
KW	prion disease; spongiform encephalopathies; Scrapie; hamster;	
XX	bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.	
OS	Cricetulus sp.	
XX		
FH	Key	Location/Qualifiers
FT	Region	176..221
XX		/note="stable region, specifically claimed in claim 3"
XX		
PN	MO200107479-A2.	
XX		
PD	01-FEB-2001.	
XX		
XX	25-JUL-2000; 2000MO-GB002873.	
XX		
XX	27-JUL-1999; 99GB-00017491.	
PR	30-JUL-1999; 99GB-00017878.	
XX		
PA	(IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.	
XX		
PI	Collinge J, Clarke AR, Walthe JP, Jackson GS, Hosszu LLP;	
XX	WPI; 2001-168538/17.	
DR		
XX		
PT	New prion peptide for treating, preventing and/or diagnosing prion	
FT	diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in	
PT	cows and Creutzfeldt-Jakob disease in humans.	
XX		
PS	Claim 3; Fig 5; 69pp; English.	
XX		
CC	This invention relates to a peptide fragment of a cellular form of prion	
CC	protein PrPc located around a disulphide bond found in PrPc. The stable	
CC	structure is a specific marker of PrPc but not soluble prion protein	
CC	(PrPsc). The PrPc peptide sequences can be used to generate an antibody	
CC	or binding agent that binds PrPc. The antibody is used to detect or	
CC	remove PrPc, and may be used in preventative medicine. The antibody may	
CC	be used in the prevention, treatment or diagnosis of a prion disease,	

CC e.g. spongiform encephalopathies, such as Scrapie in sheep, bovine
 CC spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC hamster prion protein, the stable region of the protein may be used in
 CC the production of anti-PrPc antibodies
 CC
 CC Sequence 254 AA;
 SQ
 Query Match 100.0%; Score 246; DB 4; Length 254;
 Best Local Similarity 100.0%; Pred. No. 9.2e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 Db 170 NNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQMCV 215
 RESULT 2
 ADE06737 standard; protein; 254 AA.
 XX ADE06737;
 XX
 XX 29-JAN-2004 (first entry)
 XX
 XX Chinese hamster prion protein SEQ ID NO:7.
 XX
 XX hybrid polypeptide; protein aggregation; prion polypeptide;
 KM neuroprotective; nootropic; antidiabetic; anticonvulsant;
 KM cerebroprotective; antiparkinsonian; cytostatic; nephroprotective; cardiant;
 KM antiinflammatory; antiarteriosclerotic; gene therapy;
 KM Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
 KM Alzheimer's disease; Type II diabetes; Huntington's disease;
 KM immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
 KM amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
 KM Frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
 KM familial amyloidotic polyneuropathy; medullary carcinoma;
 KM chronic renal failure; congestive heart failure; chronic inflammation;
 KM atherosclerosis.
 OS
 XX Cricetus griseus.
 XX
 XX MO2003085086-A2.
 XX
 XX 16-OCT-2003.
 XX
 XX 08-APR-2003; 2003MO-US010856.
 XX
 XX 09-APR-2002; 2002US-0371610P.
 XX
 XX (SCRI) SCRIPPS RES INST.
 XX
 XX Burton DR, Williamson RA, Moroncini G;
 XX
 XX WPI; 2003-877028/81.
 XX
 XX New motif-grafted hybrid polypeptides binding to the infectious form of a
 PT prion, useful for diagnosing or treating diseases of protein aggregation
 PT or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or
 PT diabetes.
 XX
 XX Disclosure; SEQ ID NO 7, 115pp; English.
 XX
 XX The present invention describes a hybrid polypeptide (I) comprising: (a)
 CC a polypeptide motif containing a sufficient number of contiguous amino
 CC acid residues from a polypeptide associated with a disease of protein
 CC aggregation or conformation to bind an aggregating form of the
 CC polypeptide or to a disease-associate conformer of the polypeptide; and
 CC (b) an additional amino acids from a polypeptide other than the
 CC polypeptide from which the motif is derived, where the resulting hybrid
 CC polypeptide binds with greater affinity to a disease causing or
 CC infectious conformer of the polypeptide than is the source of the
 CC polypeptide motif compared to a benign form of the polypeptide. Also

CC described: (1) a nucleic acid molecule encoding (1); (2) a vector
 CC comprising the nucleic acid molecule; (3) a cell comprising the vector;
 CC (4) detecting an isoform or a PrPc form of a prion polypeptide or a
 CC polypeptide associated with a disease of protein aggregation, in a sample
 CC (5) a solid support comprising a plurality of polypeptides described
 CC above; (6) detecting cells that contain a protein conformer associated
 CC with a disease of protein aggregation; (7) preparing a hybrid molecule
 CC that specifically interacts with one conformer of a protein involved in
 CC the disease mentioned above; and (8) an anti-idotype antibody that
 CC specifically binds to an infectious form of a prion protein. (1) has
 CC neuroprotective, nootropic, antidiabetic, anticonvulsant,
 CC cerebroprotective, antiparkinsonian, cytostatic, nephroprotective, cardiant,
 CC antiinflammatory and antiarteriosclerotic activities, and can be used in
 CC gene therapy. The composition and methods of the present invention can be
 CC used in diagnosing or treating diseases of protein aggregation or
 CC conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine
 CC spongiform encephalopathy, Alzheimer's disease, Type II diabetes,
 CC Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis
 CC associated with chronic inflammatory disease, hereditary systemic
 CC amyloidosis associated with autosomal dominant inheritance of variant
 CC transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,
 CC Parkinson's disease, Frontotemporal dementia, multiple myeloma, plasma
 CC cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma
 CC of thyroid, chronic renal failure, congestive heart failure, senile
 CC cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis
 CC or familial amyloidosis. The present sequence is used in the
 CC exemplification of the present invention.
 XX
 XX Sequence 254 AA;
 SQ
 Query Match 100.0%; Score 246; DB 7; Length 254;
 Best Local Similarity 100.0%; Pred. No. 9.2e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
 Db 170 NNQNNFVHDCVNIITIKQHTVTTTGGNFETDVKMERVVEQMCV 215
 RESULT 3
 ADE06736 standard; protein; 254 AA.
 XX ADE06736;
 XX
 XX 29-JAN-2004 (first entry)
 XX
 XX Armenian hamster prion protein SEQ ID NO:6.
 XX
 XX hybrid polypeptide; protein aggregation; prion polypeptide;
 KM neuroprotective; nootropic; antidiabetic; anticonvulsant;
 KM cerebroprotective; antiparkinsonian; cytostatic; nephroprotective; cardiant;
 KM antiinflammatory; antiarteriosclerotic; gene therapy;
 KM Creutzfeldt-Jakob disease; scrapie and bovine spongiform encephalopathy;
 KM Alzheimer's disease; Type II diabetes; Huntington's disease;
 KM immunoglobulin amyloidosis; amyloidosis; chronic inflammatory disease;
 KM amyotrophic lateral sclerosis; Pick's disease; Parkinson's disease;
 KM Frontotemporal dementia; multiple myeloma; plasma cell dyscrasia;
 KM familial amyloidotic polyneuropathy; medullary carcinoma;
 KM chronic renal failure; congestive heart failure; chronic inflammation;
 KM atherosclerosis.
 OS
 XX Mesocricetus auratus.
 XX
 XX MO2003085086-A2.
 XX
 XX 16-OCT-2003.
 XX
 XX 08-APR-2003; 2003MO-US010856.
 XX
 XX 09-APR-2002; 2002US-0371610P.
 XX
 XX (SCRI) SCRIPPS RES INST.

XX PI Burton DR, Williamson RA, Moroncini G;
 XX MPI; 2003-877028/81.
 XX
 PT New motif-grafted hybrid polypeptides binding to the infectious form of a
 PT prion, useful for diagnosing or treating diseases of protein aggregation
 PT or conformation, e.g. amyloidosis, Alzheimer's disease, renal failure or
 PT diabetes.
 XX
 PS Disclosure; SEQ ID NO 6; 115pp; English.
 XX
 CC The present invention describes a hybrid polypeptide (1) comprising: (a)
 CC a polypeptide motif containing a sufficient number of contiguous amino
 CC acid residues from a polypeptide associated with a disease of protein
 CC aggregation or conformation to bind an aggregating form of the
 CC polypeptide or to a disease-associated conformer of the polypeptide; and
 CC (b) an additional amino acid from a polypeptide other than the
 CC polypeptide from which the motif is derived, where the resulting hybrid
 CC polypeptide binds with greater affinity to a disease causing or
 CC infectious conformer of the polypeptide than is the source of the
 CC polypeptide motif compared to a benign form of the polypeptide. Also
 CC described: (1) a nucleic acid molecule encoding (1); (2) a vector
 CC comprising the nucleic acid molecule; (3) a cell comprising the vector;
 CC (4) detecting an isoform or a PrP^{Sc} form of a prion polypeptide or a
 CC polypeptide associated with a disease of protein aggregation, in a sample
 CC ; (5) a solid support comprising a plurality of polypeptides described
 CC above; (6) detecting cells that contain a protein conformer associated
 CC with a disease of protein aggregation; (7) preparing a hybrid molecule
 CC that specifically interacts with one conformer of a protein involved in
 CC the disease mentioned above; and (8) an anti-idiotypic antibody that
 CC specifically binds to an infectious form of a prion protein. (1) has
 CC neuroprotective, neurotropic, antidiabetic, anticonvulsant,
 CC cerebroprotective, antiparkinsonian, cytostatic, nephroprotective, cardiant,
 CC antiinflammatory and antihypertensive activities, and can be used in
 CC gene therapy. The composition and methods of the present invention can be
 CC used in diagnosing or treating diseases of protein aggregation or
 CC conformation, such as Creutzfeldt-Jakob disease, scrapie and bovine
 CC spongiform encephalopathy, Alzheimer's disease, Type II diabetes,
 CC Huntington's disease, immunoglobulin amyloidosis, reactive amyloidosis
 CC associated with chronic inflammatory disease, hereditary systemic
 CC amyloidosis associated with autosomal dominant inheritance of variant
 CC transthyretin gene, amyotrophic lateral sclerosis, Pick's disease,
 CC Parkinson's disease, frontotemporal dementia, multiple myeloma, plasma
 CC cell dyscrasias, familial amyloidotic polyneuropathy, medullary carcinoma
 CC of thyroid, chronic renal failure, congestive heart failure, senile
 CC cardiac and systemic amyloidosis, chronic inflammation, atherosclerosis
 CC or familial amyloidosis. The present sequence is used in the
 CC exemplification of the present invention.
 CC
 XX
 SQ Sequence 254 AA;
 XX
 QY
 DB 1 NNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMERVVEQMCV 46
 170 NNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMERVVEQMCV 215
 XX
 RESULT 4
 AAB72350
 ID AAB72350 standard; peptide: 253 AA.
 XX
 AC AAB72350;
 XX
 DT 17-MAY-2001 (first entry)
 XX
 DE Marmoset prion protein cellular form (PrPc) amino acid sequence.
 XX
 KW Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;
 KW prion disease; spongiform encephalopathies; Scrapie; marmoset;

KW bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.
 XX
 OS Callitrix jacchus.
 XX
 FH Key Location/Qualifiers
 FT Region 176..221
 FT /note="Stable region, specifically claimed in claim 3"
 XX
 PN WO200107479-A2.
 XX
 PD 01-FEB-2001.
 XX
 PF 25-JUL-2000; 2000WO-GB002873.
 XX
 PR 27-JUL-1999; 99GB-00017491.
 PR 30-JUL-1999; 99GB-00017878.
 XX
 PA (IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.
 XX
 PI Collinge J, Clarke AR, Waltho JP, Jackson GS, Hosszu LLP;
 XX
 DR MPI; 2001-168538/17.
 XX
 PT New prion peptide for treating, preventing and/or diagnosing prion
 PT diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in
 PT cows and Creutzfeldt-Jakob disease in humans.
 XX
 PS Claim 3; Fig 5; 69pp; English.
 XX
 CC This invention relates to a peptide fragment of a cellular form of prion
 CC protein PrPc located around a disulphide bond found in PrPc. The stable
 CC structure is a specific marker of PrPc but not soluble prion protein
 CC (PrP^{Sc}). The PrPc peptide sequences can be used to generate an antibody
 CC or binding agent that binds PrPc. The antibody is used to detect or
 CC remove PrPc, and may be used in preventative medicine. The antibody may
 CC be used in the prevention, treatment or diagnosis of a prion disease,
 CC e.g. spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease
 CC (CJD) in humans. The present sequence represents the cellular form of
 CC marmoset prion protein, the stable region of the protein may be used in
 CC the production of anti-PrPc antibodies
 CC
 XX
 SQ Sequence 253 AA;
 XX
 QY
 DB 1 NNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMERVVEQMCV 46
 170 NNONNFVHDCVNTTIKQHTVTTTGGKGFETDVKKMERVVEQMCV 215
 XX
 RESULT 5
 ABG94340
 ID ABG94340 standard; protein: 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 KW Human; mouse; rat; antimicrobial; anti-allergic; immunomodulatory;
 KW cytoskeletal; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KW vaccine; infectious disease.
 XX
 OS Mus sp.
 OS
 PN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX

```

XX 21-JAN-2002; 2002MO-IB000166.
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-032698P.
PR 07-NOV-2001; 2001US-0331045P.
XX
PR (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P,
PI Piossek C;
XX
XX WPI; 2002-627351/67.
XX
XX Molecular antigen array used in the production of vaccines for infectious
PT diseases.
PT
XX Disclosure; Page 438; 441pp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide
CC (Abeta1-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC scaffold interact through the association to form an ordered and the
CC repetitive antigen array. The invention also comprises a coat protein
CC capable of forming a capsid which comprises mutant Obeta coat proteins
CC having an amino acid sequence selected from five amino acid sequences
CC fully defined in the specification. The compounds of the invention may
CC have antimicrobial, antiallergic, immunomodulatory, cyostatic,
CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
CC immunisation and as a vaccine. The present sequence represents a protein
CC sequence used to create the compositions of the invention
XX
XX Sequence 124 AA;
SQ
Query Match
Best Local Similarity 98.0%; Score 241; DB 5; Length 124;
Matches 45; Conservative 1; Mismatched 0; Indels 0; Gaps 0;
QY 1 NNONFVHDCVITTKQHTVTTTNGENFTDVMGRVVEQMCV 46
Db 50 SNONFVHDCVITTKQHTVTTTNGENFTDVMGRVVEQMCV 95
:|||||
ID ABG80652 standard; protein; 124 AA.
ABG80652
AC ABG80652;
XX
XX
XX 29-NOV-2002 (first entry)
DT
XX
XX Mouse truncated prion protein with C terminal cysteine containing linker.
XX
XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
XX molecular scaffold; amyloid beta; beta 1-42; influenza; mite;
XX graft versus host disease; Igg-mediated allergic reaction; anaphylaxis;
XX adult respiratory distress syndrome; AIDS; Crohn's disease;
XX allergic asthma; acute lymphoblastic leukemia; non-Hodgkin's lymphoma;
XX Grave's disease; systemic lupus erythematosus; osteoporosis;
XX inflammatory immune disease; myasthenia gravis; multiple sclerosis;
XX immunoproliferative disease lymphadenopathy; Alzheimer's disease;

```

KW	angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
KW	rhematoid arthritis; diabetes; infectious disease; factor Xa;
KW	enterokinase; cysteine-containing linker.
XX	Mus sp.
OS	Synthetic.
PN	WO200256907-A2.
XX	
PD	25-Jul-2002.
XX	
PF	21-Jan-2002; 2002MO-IB000168.
XX	
PR	19-Jan-2001; 2001US-0262379P.
PR	04-May-2001; 2001US-0288549P.
PR	05-Oct-2001; 2001US-0326988P.
PR	07-Nov-2001; 2001US-0331045P.
PA	(CYTO-) CYTOS BIOTECHNOLOGY AG.
PA	(NOVS) NOVARTIS PHARMA AG.
PA	(MAUR/) MAURER P.
PA	(LECH/) LECHNER F.
PA	(ORTM/) ORTMANN R.
PA	(LUEB/) LUEBEND R.
PA	(STAU/) STAUFENBIEL M.
PA	(FREY/) FREY P.
PI	Maurer P, Lechner F, Ortman R, Luegend R, Staufenbiel M, Frey P,
PI	Renner WA, Bachmann M, Tiesot A, Seibel P, Plosssek C,
PI	WFI; 2002-636514/68.
DR	
XX	
PT	Molecular antigen array used in the production of vaccines for infectious
XX	diseases.
XX	
XX	Example 7; Page 415; 418pp; English.
XX	
XX	The invention relates to a composition comprising: (a) a non-natural
CC	molecular scaffold comprising: (i) a core particle selected from: (1) a
CC	core particle of a non-natural origin; and (2) a core particle of natural
CC	origin; and (ii) an organiser comprising at least one first attachment
CC	site, where the organiser is connected to the core particle by at least
CC	one covalent bond; (b) an antigen or antigenic determinant with at least
CC	one second attachment site, where the antigen or antigenic determinant is
CC	attached to the first attachment site; and (c) an antigen or antigenic
CC	determinant, where the second attachment site is capable of association
CC	through at least one non-peptide bond to the first attachment site; and
CC	where the antigen or antigenic determinant and the scaffold antigen interact
CC	through the association to form an ordered and repetitive antigen array.
CC	Also included is a process for producing a non-naturally occurring
CC	ordered and repetitive antigen array. The composition is used in
CC	immunisation and as a vaccine for diseases such as influenza, graft
CC	versus host disease, Igg-mediated allergic reactions, anaphylaxis, adult
CC	respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
CC	acute lymphoblastic leukaemia (ALL), Crohn's disease, Grave's disease,
CC	systemic lupus erythematosus, inflammatory immune diseases, myasthenia
CC	gravis, immunoproliferative disease lymphadenopathy.
CC	Angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
CC	thrombotic thrombocytopenic purpura, multiple sclerosis, Alzheimer's disease,
CC	osteoporosis and infectious diseases. The present sequence is a modified
CC	antigen for use in the array of the invention. The antigen is modified to
CC	possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
CC	containing N- or C-terminal linker peptide which serves as the attachment
CC	point to a virus like particle or bacterial protein (the scaffold
CC	protein)
XX	
XX	Sequence 124 AA;
XX	
XX	Query Match 98.0%; Score 241; DB 5; Length 124;
XX	Best Local Similarity 97.8%; Pred. No. 1.8e-23;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
:|||||
50 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 95

RESULT 7
ADD24200
ID ADD24200 standard; protein; 124 AA.

AC ADD24200;

DT 15-JAN-2004 (first entry)

DE mPrP-EK-Fc* cleaved protein sequence.

XX vaccine composition; virus-like particle; core particle;

KM first attachment site; antigen; antigenic determinant; prion protein;

KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;

KM prion disease; Bovine Spongiform Encephalopathy; BSE;

KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.

OS Unidentified.

OS prion.

PN MO2003059386-A2.

PD 24-JUL-2003.

PF 17-JAN-2003; 2003MO-EP000460.

PR 18-JAN-2002; 2002US-00050902.

PR 21-JAN-2002; 2002MO-IB000166.

PR 08-JUL-2002; 2002US-0393725P.

PR 18-JUL-2002; 2002US-0396590P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX PA

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RESULT 8

AB07316
ID AAB07316 standard; protein; 208 AA.

AC AAB07316;

DT 17-OCT-2000 (first entry)

DE Mouse prion protein sequence.

XX Mouse; prion protein; transmissible spongiform encephalopathy;

KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.

XX Mus sp.

XX Key

FT Region

FT /note="Repeat region consisting of tandem repeats of

FT repeat unit: PHGGGMCQ (AAB07319)"

FT Modified-site

FT /note="C-terminal phospho-inositol glycolipid membrane

FT anchor (-GPI)"

XX MO200029850-A1.

XX 25-MAY-2000.

XX 27-OCT-1999; 99MO-FI000897.

XX 17-NOV-1998; 98FI-00002481.

XX (WALL-) WALLAC OY.

XX (BBSR-) BBSRC OFFICE.

XX Hope J, Barnard GJR, Birkett CR;

XX WPI; 2000-387880/33.

XX Novel immunoassay for prion protein, used for the determination of

XX transmissible spongiform encephalopathies in bovine.

XX Disclosure; Page 41-42; 50pp; English.

XX The present sequence is the mouse prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of Transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

XX this protein in body fluid or tissue samples may be measured by an assay

XX of the present invention, in which a PrP epitope is captured by an

XX antibody, which is then detected. The presence of PrP indicates TSE. PrP

XX epitopes (AAB07320-B07326) are derived from the protease resistant core

XX of PrP that is occluded when the PrP is in an aggregated state

XX Sequence 208 AA;

Query Match 98.0%; Score 241; DB 3; Length 208;

Best Local Similarity 97.8%; Pred. No. 3.3e-23; Indels 0; Gaps 0;

Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46

Db 147 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 192

RESULT 9

AAB07327
ID AAB07327 standard; protein; 208 AA.

XX AAB07327;

```

XX 17-OCT-2000 (first entry)
XX Mouse prion protein sequence.
XX
XX Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX Mus sp.
XX
XX Key Location/Qualifiers
XX Region 37..68
XX /note= "Repeat region consisting of tandem repeats of
XX Disulfide-bond repeat unit: PHGGGWGQ (AAB07319)"
XX Modified-site 156..191
XX 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX WO20029849-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99WO-FI000896.
XX
XX 17-NOV-1998; 98FI-00002480.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-399778/34.
XX
XX New immunoassay for prion protein, used for determination of
XX transmissible spongiform encephalopathies in mammals, comprises specific
XX capture antibody.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an assay
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
XX
XX Sequence 208 AA;
SQ

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Query Match 98.0%; Score 241; DB 3; Length 208;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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```

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 147 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 192

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RESULT 10
ABG31904
ID ABG31904 standard; protein; 208 AA.
XX
AC ABG31904;
XX
DT 05-NOV-2002 (first entry)
XX
DE Chimera-type prion protein #2.
XX

```

```

KW Prion; follicular dendritic cells; FDC; infection; blood preparation;
KW food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX
XX Synthetic.
XX
XX WO200261418-A1.
XX
XX 08-AUG-2002.
XX
XX 31-JAN-2002; 2002WO-JP000803.
XX
XX 31-JAN-2001; 2001JP-00024279.
XX
XX (TOHO) UNITI TOROKU.
XX
XX Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Claim 9; Page 55-57; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a chimeric type prion related protein of the
XX invention
XX
XX Sequence 208 AA;
SQ

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```

Query Match 98.0%; Score 241; DB 5; Length 208;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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```

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 148 SNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 193

```

```

RESULT 11
ADJ6133
ID ADJ6133 standard; protein; 208 AA.
XX
AC ADJ6133;
XX
DT 06-MAY-2004 (first entry)
XX
DE Mouse prion protein, PrP.
XX
KW Prion protein; detection; mouse; PrP.
XX
XX Mus sp.
XX
XX JP2003130880-A.
XX
XX 08-MAY-2003.
XX
XX 29-OCT-2001; 2001JP-00330696.
XX
XX 29-OCT-2001; 2001JP-00330696.
XX
XX (FJRE) FUJIREBIO KK.
XX
XX WPI; 2003-639503/61.
XX
XX N-PSDB; ADJ6131.
XX

```


XX Reagent for detecting abnormal prion protein in sample, comprises
PT denaturant treated antibody or its Fab fragment that specifically reacts
PT with antigen in prion protein, immobilized on magnetic particle.
XX Disclosure; SEQ ID NO 1; 99p; Japanese.
XX
CC The present invention relates to a reagent (1) for detecting abnormal
CC prion protein, comprising an antibody or its Fab fragment that
CC specifically reacts with an antigen in the prion protein, immobilized on
CC a magnetic particle, where the antibody or its fragment is treated with a
CC denaturant. (II) enables highly-sensitive detection of abnormal prion
CC protein can in a sample, within a short time, and without performing
CC electrophoresis and centrifugation procedures which is time-consuming.
CC The present sequence is a mouse prion protein (PrP), used to illustrate
CC the invention.
XX
SQ Sequence 208 AA;
XX
Query Match 98.0%; Score 241; DB 7; Length 208;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 46
DB 147 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 192
XX
RESULT 12
ABG31905
ID ABG31905 standard; protein; 209 AA.
XX
AC ABG31905;
XX
DT 05-NOV-2002 (first entry)
XX
DE HCHV type prion protein.
XX
KM Prion; follicular dendritic cells; FDC; infection; blood preparation;
KM food; cosmetic; CJD; Creutzfeldt-Jacob disease.
XX
OS Synthetic.
XX
PN WO200261418-A1.
XX
PD 08-AUG-2002.
XX
PF 31-JAN-2002; 2002MO-JP000803.
XX
PR 31-JAN-2001; 2001JP-00024279.
XX
PA (TOHO) UNIV TOHOKU.
XX
PI Kitamoto T, Miyoshi K, Mohri S;
XX
DR WPI; 2002-619277/66.
XX
PT Screening (non-)human prion disease infection factor based on abnormal
PT prion protein sedimentation in non-human follicular dendritic cells as
PT indication, applicable in safety test on e.g. drugs and cosmetics.
XX
PS Claim 9; Page 57-58; 69p; Japanese.
XX
CC This invention relates to a novel method for screening human or non-
CC human prion disease infection factor in a sample by using abnormal prion
CC protein sedimentation in non-human follicular dendritic cells (FDC) as
CC indication. The method of the invention is useful for screening (non-)
CC human prion disease infection factor, which is applicable in safety tests
CC on drugs like blood preparations, foods and cosmetics, and for developing
CC drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
CC disease (CJD). The method of the invention is simple and quick. The
CC present sequence represents a Chv type prion related protein of the
CC invention

XX Sequence 209 AA;
SQ
XX
Query Match 98.0%; Score 241; DB 5; Length 209;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 46
DB 148 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 193
XX
RESULT 13
AAB30801
ID AAB30801 standard; protein; 211 AA.
XX
AC AAB30801;
XX
DT 02-APR-2001 (first entry)
XX
DE Amino acid sequence of a mouse prion protein.
XX
KM SCHAG; self-coalesce; higher-order aggregate; amyloidogenic domain;
KM aggregation; fibril; phenotypic alteration; gene therapy;
KM disease resistance; plant pigmentation; prion disease.
XX
OS Mus sp.
XX
PN WO200075324-A2.
XX
PD 14-DEC-2000.
XX
PF 09-JUN-2000; 2000MO-US015876.
XX
PR 09-JUN-1999; 99US-0138833P.
XX
PA (ARCH-) ARCH DEV CORP.
XX
PI Lindquist S, Li L, Ma J, Liu J, Sondheimer N, Scheibel T;
XX
DR WPI; 2001-061723/07.
XX
DR N-PSDB; AAC86686.
XX
PT New nucleic acid encoding chimeric proteins with self-assembly
PT properties, useful e.g. for diagnosis and treatment of prion diseases,
PT also related aggregates, fibrils and polymers.
XX
PS Claim 11; Page 137-138; 188p; English.
XX
CC The present sequence represents a prion protein. The specification
CC describes chimeric polypeptides, which comprise at least one SCHAG (self-
CC coalesce into higher-order aggregates) amino acid sequence fused in
CC frame with a polypeptide of interest (which is other than a marker
CC protein, a glutathione-S-transferase or a staphylococcal nuclear
CC protein). The specification also describes chimeric polypeptides that
CC comprises an amyloidogenic domain that causes aggregation into fibrils.
CC The chimeric polypeptides are used to prepare polymers with multiple
CC reactivities, e.g. derivatised with enzymes, or specific binding
CC partners, and useful e.g. for performing multi-step chemical reactions.
CC They can be used create an inducible, or stable phenotypic alteration in
CC a cell, e.g. for gene therapy, protein production, imparting disease
CC resistance to plants, altering plant pigmentation and for diagnosis and
CC treatment of prion diseases
XX
SQ Sequence 211 AA;
XX
Query Match 98.0%; Score 241; DB 4; Length 211;
Best Local Similarity 97.8%; Pred. No. 3.3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
OY 1 NNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 46
DB 149 SNQNNFVHDCVNTTIKQHTVTTTGGKGFETDVKMERVVEQMCV 194

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RESULT 14
ABR42793
ID ABR42793 standard; protein; 225 AA.
XX
AC ABR42793;
XX
DT 08-SEP-2003 (first entry)
XX
DE Rat prion protein.
XX
KW Rat; prion protein; prionosis; nootropic; neuroprotective; immunogen;
vaccine.
XX
OS Rattus sp.
XX
PN MO2003045128-A2.
XX
PD 05-JUN-2003.
XX
PF 21-NOV-2002; 2002MO-US037634.
XX
PR 21-NOV-2001; 2001US-0331801P.
XX
PA (UYNV ) UNITV NEW YORK STATE.
XX
PI Frangione B, Wislowski T, Sigurdsson EM;
XX
PW MPI, 2003-505145/47.
XX
PT New synthetic immunogenic but non-deposit forming peptides, useful for
inducing an immune response to prions, amyloids, amylin or amylin
PT fibrils, particularly for treating e.g. Alzheimer's, scrapie or
PT Creutzfeldt-Jacob disease.
XX
PS Disclosure; Page 228-229; 265pp; English.
XX
CC The present sequence is the amino acid sequence of rat prion protein. The
invention provides a synthetic immunogenic but non-deposit-forming
CC polypeptide that is homologous to human (see ABR42789) or bovine (see
ABR42798) prion protein. Such peptides, alone or conjugated to an
CC immunostimulant, are used to induce an immune response to prion, and
CC immunizing compositions comprising the peptides are used in a claimed
CC method for inducing an immune response to hnp and prion deposits.
CC Antibodies directed against the peptides can be used in passive
immunization
XX
SQ Sequence 225 AA;
XX
Query Match 98.0%; Score 241; DB 6; Length 225;
Best Local Similarity 97.8%; Pred. No. 3.6e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 NNQNNFVHDCVNIITIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
:|||||
DB 142 SNQNNFVHDCVNIITIKQHTVTTTGGNFETEDVKMERVVEQMCV 187
XX
RESULT 15
ADB85240
ID ADB85240 standard; protein; 226 AA.
XX
AC ADB85240;
XX
DT 04-DEC-2003 (first entry)
XX
DE Rat prion-related protein SEQ ID NO:121.
XX
KW rat; streptozocin; kinase; phosphatase; ion channel protein; receptor;
transporter; G-protein coupled receptor; GPCR; DNA-binding proteins;
protease; enzyme; analgesic; gene therapy; pain; diabetes.
XX

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OS Rattus norvegicus.
XX
PN EP184297-A2.
XX
PD 19-FEB-2003.
XX
PF 26-JUL-2002; 2002EP-00255228.
XX
PR 27-JUL-2001; 2001GB-00018354.
XX
PR 07-FEB-2002; 2002GB-00002880.
XX
PA (WARN ) WARNER LAMBERT CO.
XX
PI Brooksbank RA, Dixon AK, Lee K, Pinnock RD;
XX
PW MPI, 2003-364994/35.
XX
DR N-PSDB; ADB85241.
XX
PT Use of gene sequence that is down-regulated in response to streptozocin-
induced diabetes, vector, host cell, animal, polypeptide and antibody, in
PT screening of compounds for treating or diagnosing pain.
XX
PS Disclosure; Page 190; 256pp; English.
XX
CC The invention relates to a novel isolated gene sequence that is down-
regulated in the spinal cord in response to streptozocin-induced
CC diabetes, or comprising, hybridizing or having at least 80% sequence
CC identity to a sequence whose expression products are kinases,
CC phosphatases, ion channel proteins, receptors, transporters, G-protein
coupled receptor proteins, DNA-binding proteins, proteases or enzymes,
CC given in the specification. A gene of the invention has analgesic
CC activity, and may have a use in gene therapy. The gene sequences, vector,
CC host cell, animal, polypeptide and antibody are useful for screening of
CC compounds for diagnosing or treating pain. The kits are useful for
CC simultaneous, separate or sequential detecting and/or quantifying down-
regulation of a gene sequence in the spinal cord of a mammal in response
CC to streptozocin-induced diabetes. The compound or pharmaceutical
CC composition is useful as a medicament for treating or diagnosing pain.
CC The present sequence represents a protein encoded by a gene of the
invention.
XX
SQ Sequence 226 AA;
XX
Query Match 98.0%; Score 241; DB 7; Length 226;
Best Local Similarity 97.8%; Pred. No. 3.6e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
XX
QY 1 NNQNNFVHDCVNIITIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
:|||||
DB 142 SNQNNFVHDCVNIITIKQHTVTTTGGNFETEDVKMERVVEQMCV 187
XX
Search completed: December 3, 2004, 00:55:40
Job time : 77.1639 secs

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GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:12:37 ; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
Sequence: 1 NNQNNFVHDCVNITIKQHTV.....ENFTEDVKMERVVEQMCV 46

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	246	100.0	254	B34759	prion protein - go
2	246	100.0	254	A34759	prion protein - Ch
3	245	99.6	232	S71041	major prion protei
4	241	98.0	226	A53892	prion-related prot
5	241	98.0	254	A23544	major prion protei
6	240	97.6	241	S71048	major prion protei
7	240	97.6	241	S71056	major prion protei
8	240	97.6	245	S71045	major prion protei
9	240	97.6	252	S53634	major prion protei
10	240	97.6	253	1 UHUH	major prion protei
11	240	97.6	253	184423	major prion protei
12	240	97.6	253	S71055	major prion protei
13	240	97.6	253	137032	major prion protei
14	239	97.2	252	161848	major prion protei
15	238	96.7	264	S71137	prion protein - gr
16	237	96.3	254	1 UHYTH	major prion PrP-Sc
17	237	96.3	257	A23545	major prion PrP27-
18	235	95.5	245	S53627	major prion protei
19	235	95.5	252	S53631	major prion protei
20	235	95.5	253	S53624	major prion protei
21	235	95.5	253	S53623	major prion protei
22	235	95.5	253	S53620	major prion protei
23	235	95.5	253	S53625	major prion protei
24	235	95.5	253	S53635	prion protein - si
25	235	95.5	253	S53614	major prion protei
26	235	95.5	253	161847	major prion protei
27	235	95.5	253	S53616	major prion protei
28	235	95.5	253	S53618	major prion protei
29	235	95.5	253	S53619	major prion protei

30	235	95.5	256	2	JU0268	major prion protei
31	235	95.5	264	2	A54330	major prion protei
32	234	95.1	256	2	S71149	prion protein - go
33	234	95.1	256	2	A54281	major prion protei
34	234	95.1	260	2	S53629	major prion protei
35	233	94.7	257	2	JQ1900	major prion protei
36	231	93.9	239	2	S53633	major prion protei
37	230	93.5	253	2	S53617	major prion protei
38	229	93.1	252	2	JC6175	prion protein - ra
39	78	31.7	267	2	A37372	prion protein homo
40	77	31.3	267	1	UCH	major prion protei
41	77	31.3	273	2	A46280	prion protein - ch
42	64	26.0	139	2	H90004	hypothetical prote
43	61.5	25.0	533	1	D71338	probable ribose/ga
44	60.5	24.6	182	2	A10130	conserved hypothe
45	59	24.0	346	2	B71496	cryptophan-tRNA 11

ALIGNMENTS

RESULT 1
B34759
prion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:g191182; PIDN:AAA37014.1; PID:g191183
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 246; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 170 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 215

RESULT 2

A34759
prion protein - Chinese hamster
C/Species: Citicellus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; Dearmond, S.J.; Prusiner, M.J. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:Q60506; GB:M33958; NID:g191180; PIDN:AAA37013.1; PID:g387056
C/Superfamily: major prion protein

Query Match
Best Local Similarity 100.0%; Score 246; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 1e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 170 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQMCV 215

RESULT 3

S71041

major prion protein - black-handed spider monkey (fragment)
C:Species: Ateltes Geoffroyi (black-handed spider monkey)
C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71041; S53630
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71041

A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: UNIPROT:P40246; EMBL:U08309; NID:G474376; PIDN:AAC50097.1; PID:G4743
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53630
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, 'R', 196-231 <SCW>
A:Cross-references: EMBL:U08309
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 99.6%; Score 245; DB 2; Length 232;
Best Local Similarity 97.8%; Pred. No. 1.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 46
154 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 199
:|||||

RESULT 4

A53892

prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C:Accession: A53892
R:Liaw, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A:Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2869848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LIA>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA1947.1; PID:G206392
C:Superfamily: major prion protein

Query Match 98.0%; Score 241; DB 2; Length 226;
Best Local Similarity 97.8%; Pred. No. 3.7e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 46
142 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 187
:|||||

RESULT 5

A23544

major prion protein precursor - mouse
N:Alternate names: PrP, Scrapie prion
C:Species: Mus musculus (house mouse)
C:Date: 22-Jul-1987 #sequence_revision 22-Jul-1987 #text_change 09-Jul-2004
C:Accession: A23544; S02521; A22315
R:Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S.
Cell 51, 651-662, 1987
A:Title: Distinct prion proteins in short and long scrapie incubation period mice.
A:Reference number: A23544; MUID:88052869; PMID:2890436
A:Accession: A23544
A:Molecule type: DNA

Query Match 97.6%; Score 240; DB 2; Length 241;
Best Local Similarity 95.7%; Pred. No. 5.2e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 46
:|||||

A:Residues: 1-254 <MES>
A:Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529
A:Experimental source: strain NZM and I/LmJ
A:Note: the sequence shown is from the NZM strain; the sequence from the I/LmJ strain dif
Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986
A:Reference number: A23544; MUID:86313583; PMID:3462700
A:Accession: A23544
A:Molecule type: mRNA
A:Residues: 1-254 <LOC>
R:Hope, J.; Mulhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.
Eur. J. Biochem. 172, 271-277, 1988
A:Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain at
A:Reference number: S02521; MUID:88166695; PMID:2894984
A:Accession: S02521
A:Molecule type: protein
A:Residues: 1-254 <HOP>
R:Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.;
Nature 315, 331-333, 1985
A:Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and ur
A:Reference number: A22315; MUID:85213844; PMID:3923361
A:Accession: A22315
A:Molecule type: mRNA
A:Residues: 87-132, 'V', 134-164 <CHE>
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidyl
F:1-2/Domain: signal sequence #status predicted <SIG>
F:23-331/Product: major prion protein #status predicted <MAT>
F:232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:178-213/Diulfide bonds: tetraol predicted
F:180,196/Binding site: carboxylate (Asn) (covalent) #status predicted
F:231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 98.0%; Score 241; DB 2; Length 254;
Best Local Similarity 97.8%; Pred. No. 4.2e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 46
169 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 214
:|||||

RESULT 6

S71048

major prion protein - Callithrix jacchus (fragment)
C:Species: Callithrix jacchus
C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71048; S53632
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G47558
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53632
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.6%; Score 240; DB 2; Length 241;
Best Local Similarity 95.7%; Pred. No. 5.2e-22;
Matches 44; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNONNFVHDCVNTIKOHVTTTGTGKGFETDVKMERVVEQMCV 46
:|||||

RESULT 11
 184423
 major prion protein precursor - rhesus macaque
 C:Species: Macaca mulatta (rhesus macaque)
 C:Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004
 C:Accession: 184423; S53622; 871054
 R:Cervanekova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; I
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A>Title: Infectious amyloid precursor gene sequences in primates used for experimental t
 A:Accession: 184423
 A:Status: preliminary; translated from GB/EMBL/DBD
 A:Molecule type: DNA
 A:Residues: 1-253 <RES>
 A:Cross-references: UNIPROT:P40254; EMBL:U15163; NID:G595850; PIDN:AAA6835.1; PID:G5958
 R:Schachtz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995

	Query Match	97.6%	Score 240;	DB 2;	Length 253;	
	Best Local Similarity	95.7%;	Pred. No. 5-se-22;			
	Matches	44; Conservative	2; Mismatches	0; Indels	0; Gaps	0
Qy	1	NNNNFVFDGCVNITIKOHTVTTTTGGNFETDVKMMERVRVMGV	46			
Dd	170	SNQNNFVDGCVNITIKOHTVTTTTGGNFETDVKMMERVRVMGV	215			

RESULT 13
I37032
major prion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #ext_change 09-Jul-2004
C/Accession: I37032
R:Cervanikova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; Du
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental tr
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/molecule type: DNA

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
Sequence: 1 NNQNNFVHDCVNITIKQHTV.....ENFTETDVAMERVVEQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: uniprot_sprotc:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	246	100.0	240	2 Q8VHV4	Q8VHV4 microtus ag
2	246	100.0	248	2 Q8VHV5	Q8VHV5 clethrionom
3	246	100.0	254	1 PRIO_CRIGR	Q60506 cricetus
4	246	100.0	254	1 PRIO_CRIMI	Q60468 cricetus
5	246	100.0	254	1 PRIO_SIGHI	Q920C3 sigmodon hi
6	246	100.0	254	2 Q920T4	Q920T4 sigmodon fu
7	245	99.6	232	1 PRIO_ATEGE	P40246 ateles geof
8	245	99.6	252	1 PRIO_CALJA	Q811W3 spallax leuc
9	243	98.8	215	2 Q811W3	Q811W3 spallax leuc
10	243	98.8	224	2 Q866V8	Q866V8 manis sp. p
11	241	98.0	253	2 Q920T5	Q920T5 meriones un
12	241	98.0	254	1 PRIO_MOUSE	P404925 mus musculu
13	241	98.0	254	1 PRIO_MOUSE	P404925 mus musculu
14	241	98.0	254	1 PRIO_MOUSE	P404925 mus musculu
15	241	98.0	254	1 PRIO_MOUSE	P404925 mus musculu
16	241	98.0	254	1 PRIO_MOUSE	P404925 mus musculu
17	240	97.6	220	2 Q866W7	Q866W7 ochotona pr
18	240	97.6	238	1 PRIO_CERAT	Q95145 cercocebus
19	240	97.6	238	1 PRIO_CERAT	Q95145 cercocebus
20	240	97.6	238	1 PRIO_CERAT	Q95145 cercocebus
21	240	97.6	241	1 PRIO_CERAT	Q95145 cercocebus
22	240	97.6	241	1 PRIO_CERAT	Q95145 cercocebus
23	240	97.6	245	1 PRIO_CERAT	Q95145 cercocebus
24	240	97.6	245	1 PRIO_CERAT	Q95145 cercocebus
25	240	97.6	246	1 PRIO_CERAT	Q95145 cercocebus
26	240	97.6	246	1 PRIO_CERAT	Q95145 cercocebus
27	240	97.6	246	1 PRIO_CERAT	Q95145 cercocebus
28	240	97.6	246	1 PRIO_CERAT	Q95145 cercocebus
29	240	97.6	252	1 PRIO_CERAT	Q95145 cercocebus
30	240	97.6	253	1 PRIO_CERAT	Q95145 cercocebus
31	240	97.6	253	1 PRIO_CERAT	Q95145 cercocebus

32	240	97.6	253	1 PRIO_HUMAN	P04156 homo sapien
33	240	97.6	253	1 PRIO_MACFA	P40254 macaca fasc
34	240	97.6	253	1 PRIO_PONPY	P40256 pongo pygma
35	240	97.6	253	1 PRIO_PREFR	P40257 prebylis f
36	240	97.6	253	2 Q6FGR8	Q6FGR8 homo sapien
37	240	97.6	253	2 Q6FGR8	Q6FGR8 homo sapien
38	240	97.6	253	2 AAS80162	AAS80162 macaca mu
39	240	97.6	253	2 AAR12192	AAR12192 macaca mu
40	240	97.6	277	2 Q6SE81	Q6SE81 homo sapien
41	240	97.6	277	2 AAR21603	AAR21603 homo sapi
42	240	97.6	285	2 Q75942	Q75942 homo sapien
43	239	97.2	248	1 Q866V6	Q866V6 diceros bic
44	239	97.2	252	1 PRIO_ATEPA	P51446 ateles panl
45	239	97.2	260	1 PRIO_SAISC	P40258 saimiri sci

ALIGNMENTS

RESULT 1					
ID	Q8VHV4	PRELIMINARY;	PRT;	240 AA.	
AC	Q8VHV4				
DT	01-MAR-2002 (TREMBlrel. 20, Created)				
DT	01-MAR-2002 (TREMBlrel. 20, Last sequence update)				
DT	01-JUN-2003 (TREMBlrel. 24, Last annotation update)				
DE	Prion protein (Fragment).				
GN	Name=Prp;				
OS	Microtus agrestis (Short-tailed field vole).				
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;				
OC	Microtus				
OX	NCBI_TaxID=29092;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RA	Deil'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,				
RA	Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;				
RU	Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.				
CC	- SIMILARITY: Belongs to the prion family.				
DR	EMBL; AF367625; AA57232.1; -				
DR	InterPro; IPR00817; Prion.				
DR	Pfam; PF03977; Prion; 1.				
DR	Pfam; PF03991; Prion octapep; 6.				
DR	PRINTS; PR00341; PRION.				
DR	SMART; SM00157; PRP; 1.				
DR	PROSITE; PS00291; PRION_1; 1.				
DR	PROSITE; PS00706; PRION_2; 1.				
KW	Prion.				
FT	NON_TER	1	1		
FT	NON_TER	240	240		
FT	SEQUENCE	240 AA;	26308 MW;	BCA4EDJF5F76693 CRC64;	
Query Match		100.0%;	Score 246;	DB 2;	Length 240;
Best Local Similarity		100.0%;	Pred. No. 1,1e-22;		
Matches	46;	Conservative	0;	Mismatches	0;
				Indels	0;
				Gaps	0;
Qy	1 NNQNNFVHDCVNITIKQHTVTTTTKGNTFTETDVAMERVVEQMCV 46				
Db	162 NNQNNFVHDCVNITIKQHTVTTTTKGNTFTETDVAMERVVEQMCV 207				
RESULT 2					
ID	Q8VHV5	PRELIMINARY;	PRT;	248 AA.	
AC	Q8VHV5				
DT	01-MAR-2002 (TREMBlrel. 20, Created)				
DT	01-MAR-2002 (TREMBlrel. 20, Last sequence update)				
DT	01-JUN-2003 (TREMBlrel. 24, Last annotation update)				
DE	Prion protein (Fragment).				
GN	Name=Prp;				
OS	Clethrionomys glareolus (Bank vole).				
OC	Eukaryota; Metazoa; Chordata; Cranialia; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;				

```

CC Clathrinome.
OX NCBI_TaxID=51090;
RN [1]
RP SEQUENCE FROM N.A.
RA Dell'omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Garbo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367624; AAU57231.1;
DR InterPro; IPR000817; Prion.
DR Pfam; PF00337; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ NON TER 248 248
SEQUENCE 248 AA; 27259 MW; 81564ECD2773C2C CRC64;

Query Match 100.0%; Score 246; DB 2; Length 248;
Best Local Similarity 100.0%; Pred. No. 1,1e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNONNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 46
DB 170 NNONNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 215

RESULT 3
PRIO_CRIM1 STANDARD; PRT; 254 AA.
AC 060506;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Cricetus griseus (Chinese hamster).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Cricetulus.
OX NCBI_TaxID=10029;
RN [1]
RP SEQUENCE FROM N.A.
RA TISSUE=Brain;
RA MEDLINE=90158578; PubMed=2406562;
RA Lowenstein D.H., Butler D.A., Westaway D., McKinley M.P.,
RA DeArmond S.J., Prusiner S.B.;
RT "Three hamster species with different scrapie incubation times and
RT neuropathological features encode distinct prion proteins.";
RL Mol. Cell. Biol. 10:1153-1163 (1990).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC or send an email to licenses@isb-sib.ch).
CC EMBL; M33958; AAA37013.1; .

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DR PIR; A34759; A34759.
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 231
FT PROPEP 232 254
FT LIPID 231 231
FT DOMAIN 90 231
FT CARBOHYD 181 181
FT CARBOHYD 197 197
FT DISULFID 179 214
FT DOMAIN 51 91
FT REPEAT 51 59
FT REPEAT 60 67
FT REPEAT 68 75
FT REPEAT 76 83
FT REPEAT 84 91
SQ SEQUENCE 254 AA; 27823 MW; 6299CA000EB8607D CRC64;

Query Match 100.0%; Score 246; DB 1; Length 254;
Best Local Similarity 100.0%; Pred. No. 1,2e-22;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 NNONNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 46
DB 170 NNONNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 215

RESULT 4
PRIO_CRIM1 STANDARD; PRT; 254 AA.
AC 060468;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
OC Cricetulus.
OX NCBI_TaxID=10032;
RN [1]
RP SEQUENCE FROM N.A.
RA TISSUE=Brain;
RA MEDLINE=90158578; PubMed=2406562;
RA Lowenstein D.H., Butler D.A., Westaway D., McKinley M.P.,
RA DeArmond S.J., Prusiner S.B.;
RT "Three hamster species with different scrapie incubation times and
RT neuropathological features encode distinct prion proteins.";
RL Mol. Cell. Biol. 10:1153-1163 (1990).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Sträussler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its

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DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 254 254
 SQ SEQUENCE 254 AA; 27904 MW; 98E7E1D106B43B97 CRC64;
 Query Match 100.0%; Score 246; DB 2; Length 254;
 Best Local Similarity 100.0%; Pred. No. 1,2e-22;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNONNFVHDCVNTIKQHTVTTTGGKGFETTDVKKMERVVEQMCV 46
 Db 170 NNONNFVHDCVNTIKQHTVTTTGGKGFETTDVKKMERVVEQMCV 215

RESULT 7
 Prio_ATEGE STANDARD; PRT; 232 AA.
 AC P40246;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Ateles Geoffroyi (Black-handed spider monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
 OX NCBI_TaxID=5509;
 RN [1]
 RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@sib-sib.ch).
 CC -----
 DR EMBL; U08309; AAC50097.1; -
 DR PIR; S71041; S71041.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL 1 15
 FT CHAIN 16 214
 FT PROPEP 215 232
 FT LIPID 214 214
 By similarity.
 Major prion protein.
 Removed in mature form (By similarity).
 GPI-anchor amidated serine (By similarity).

FT DISULFID 163 198
 FT CARBOHYD 165 165
 FT CARBOHYD 181 181
 FT DOMAIN 44 84
 FT REPEAT 44 51
 FT REPEAT 52 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT NON_TER 232 232
 SQ SEQUENCE 232 AA; 23596 MW; 0E2D75F04C05CC4A CRC64;
 Query Match 99.6%; Score 245; DB 1; Length 232;
 Best Local Similarity 97.8%; Pred. No. 1,4e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNONNFVHDCVNTIKQHTVTTTGGKGFETTDVKKMERVVEQMCV 46
 Db 154 NNONNFVHDCVNTIKQHTVTTTGGKGFETTDVKKMERVVEQMCV 199

RESULT 8
 Prio_CALJUA STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN Name=PRNP;
 OS Callithrix jacchus (Common marmoset).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrichi.
 OX NCBI_TaxID=9483;
 RN [1]
 RP MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strussler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@sib-sib.ch).
 CC -----
 DR EMBL; U08304; AAC50092.1; -
 DR PIR; S53634; S53634.
 DR HSSP; P23907; IG04.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 22
 FT CHAIN 23 229
 FT PROPEP 230 252
 By similarity.
 Major prion protein.
 Removed in mature form (By similarity).

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FT LIPID 229 229 GPI-anchor amidated serine (By
FT DISULFID 178 213 similarity).
FT CARBOHYD 180 180 By similarity.
FT CARBOHYD 196 196 N-linked (GlcNAc..)(Potential).
FT DOMAIN 51 90 N-linked (GlcNAc..)(Potential).
FT 5 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 51 58 Q.
FT REPEAT 59 66 1.
FT REPEAT 67 74 2.
FT REPEAT 75 82 3.
FT REPEAT 83 90 4.
SQ SEQUENCE 252 AA; 27639 MW; B2800B60FDC664 CRC64;
Query Match 99.6%; Score 245; DB 1; Length 252;
Best Local Similarity 97.8%; Pred. No. 1.5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 46
DB 169 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 214
RESULT 9
Q811W3 PRELIMINARY; PRT; 215 AA.
AC Q811W3;
DT 01-JUN-2003 (TREMBlrel. 24, Created)
DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE P10N protein (Fragment).
GN Name=PRNP;
OS Spalax leucodon ehrenbergi (Ehrenberg's mole rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Spalacinae;
OC Nanospalax.
OX NCBI_TaxID=30637;
RN [1]
RP MEDLINE=22408137; PubMed=12519913;
RX van Rieede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
CC Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY133041; AANI6495.1; -.
DR InterPro: IPR000817; Prion.
DR PRINTS: PR00341; Prion.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 1 1
FT SEQUENCE 215 AA; 23470 MW; BD89A4E3DB08F649 CRC64;
QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 46
DB 139 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 184
Query Match 98.8%; Score 243; DB 2; Length 215;
Best Local Similarity 93.5%; Pred. No. 2.3e-22;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
RESULT 10
Q811W4 PRELIMINARY; PRT; 224 AA.
AC Q811W4;
DT 01-JUN-2003 (TREMBlrel. 24, Created)
DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE P10N protein (Fragment).
GN Name=PRNP;
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OS Spalax leucodon ehrenbergi (Ehrenberg's mole rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Spalacinae;
OC Nanospalax.
OX NCBI_TaxID=30637;
RN [1]
RP MEDLINE=22408137; PubMed=12519913;
RX van Rieede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
CC Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY133040; AANI6494.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 1 1
FT SEQUENCE 224 AA; 24304 MW; F7E86BC9E37FC99A CRC64;
QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 46
DB 148 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 193
Query Match 98.8%; Score 243; DB 2; Length 224;
Best Local Similarity 93.5%; Pred. No. 2.4e-22;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
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RESULT 11
Q866V8 PRELIMINARY; PRT; 250 AA.
AC Q866V8;
DT 01-JUN-2003 (TREMBlrel. 24, Created)
DT 01-JUN-2003 (TREMBlrel. 24, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE P10N protein (Fragment).
GN Name=PRNP;
OS Manis sp.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Pholidota; Manidae; Manis.
OX NCBI_TaxID=49127;
RN [1]
RP MEDLINE=22408137; PubMed=12519913;
RX van Rieede T., Smolenaars M.M., Madsen O., De Jong W.W.;
RT "Molecular evolution of the mammalian prion protein.";
CC Mol. Biol. Evol. 20:111-121(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY133050; AANI6504.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF03991; Prion octapep; 7.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 250 250
FT SEQUENCE 250 AA; 27111 MW; 1DC6879702FE0E07 CRC64;
QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 46
DB 175 NNQNNFVHDCVNITIKQHTVTTTGGNFETEDVKMMERVVEQMCV 220
Query Match 98.8%; Score 243; DB 2; Length 250;
Best Local Similarity 93.5%; Pred. No. 2.7e-22;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;
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RESULT 12
O920T5 PRELIMINARY: PRT; 253 AA.
ID O920T5
AC O920T5;
DT 01-MAY-1999 (TrEMBLrel. 10, Created)
DT 01-MAY-1999 (TrEMBLrel. 10, Last sequence update)
DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Gerbillinae;
OC Meriones.
OX NCBI_TaxID=10047;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL, AF117314; AADI985.1; -.
DR InterPro; IPR00817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion octapep; 6.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
FT NON_TER
SQ SEQUENCE 253 AA; 27747 MW; B44D16867A97307F CRC64;

Query Match 98.0%; Score 241; DB 2; Length 253;
Best Local Similarity 97.8%; Pred. No. 5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNQNNFVHDCVNTIKQHTVTTTKGKNTFETDVKKMEVVEQMCV 46
Db 169 SNQNNFVHDCVNTIKQHTVTTTKGKNTFETDVKKMEVVEQMCV 214

RESULT 13
PRIO_MOUSE STANDARD; PRT; 254 AA.
ID PRIO_MOUSE
AC P04925;
DT 13-AUG-1987 (Rel. 05, Created)
DT 01-JAN-1990 (Rel. 13, Last sequence update)
DT 01-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=Prnp; Synonyms=Prn-P;
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=NZW, and I/LNU;
RX MEDLINE=88052869; PubMed=2890436;
RA Westaway D., Goodman P.A., Mirenda C.A., McKinley M.P., Carlson G.A.,
RA Prusiner S.B.;
RT "Distinct prion proteins in short and long scrapie incubation period
RT mice.";
RL Cell 51:651-662(1987).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=86313583; PubMed=3462700;
RA Loch C., Chesebro B., Race R., Keith J.M.;
RT "Molecular cloning and complete sequence of prion protein cDNA from
RT mouse brain infected with the scrapie agent.";

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RL Proc. Natl. Acad. Sci. U.S.A. 83:6372-6376(1986).
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=88166695; PubMed=2894994;
RA Hope J., Multhaup G., Reekie L.J.D., Kimberlin R.H., Beyreuther K.;
RT "Molecular pathology of scrapie-associated fibril protein (PrP) in
RT mouse brain affected by the ME7 strain of scrapie.";
RL Eur. J. Biochem. 172:271-277(1988).
RN [4]
RP SEQUENCE FROM N.A.
RC STRAIN=NZW, TISSUE=Brain;
RX MEDLINE=99018115; PubMed=9799790;
RA Lee I.Y., Westaway D., Smit A.F.A., Wang K., Seto J., Chen L.,
RA Acharya C., Ankeney M., Baeklin D., Cooper C., Yao H., Prusiner S.B.,
RA Hood L.E.;
RT "Complete genomic sequence and analysis of the prion protein gene
RT region from three mammalian species.";
RL Genome Res. 8:1022-1037(1998).
RN [5]
RP SEQUENCE FROM N.A.
RX MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein M.J., Ueda T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Abramson R.D., Mullaly S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.U., Hutvick P.H.,
RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey U., Heltón E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalhe D.E.,
RA Schnerch A., Schein J.E., Jones S.U.M., Maiz M.A.;
RT "Generation and initial analysis of more than 15,000 full-length human
RT and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [6]
RP SEQUENCE OF 87-164 FROM N.A.
RX MEDLINE=85213844; PubMed=3923361;
RA Chesebro B., Race R., Wehrly K., Nishio J., Bloom M., Lechner D.,
RA Bergstrom S., Robbins K., Mayer L., Keith J.M., Garon C., Haase A.;
RT "Identification of scrapie prion protein-specific mRNA in scrapie-
RT infected and uninfected brain.";
RL Nature 315:331-333(1985).
RN [7]
RP STRUCTURE BY NMR OF 120-230.
RX MEDLINE=96317593; PubMed=8700211;
RA Riek R., Hornemann S., Wider G., Billeter M., Glockshuber R.,
RA Wüthrich K.;
RT "NMR structure of the mouse prion protein domain PrP(121-221).";
RL Nature 382:180-182(1996).
RN [8]
RP STRUCTURE BY NMR OF 23-231.
RX MEDLINE=97424376; PubMed=9280298;
RA Riek R., Hornemann S., Wider G., Glockshuber R., Wüthrich K.;
RT "NMR characterization of the full-length recombinant murine prion
RT protein, mPrP(23-231).";
RL FEBS Lett. 413:282-288(1997).
RN [9]
RP HYDROXYLATION OF PRO-44.
RX MEDLINE=20490354; PubMed=11032800;
RA Gill A.C., Ritchie M.A., Hunt L.G., Steane S.E., Davies K.G.,
RA Bocking S.P., Rhie A.G.O., Bennett A.D., Hope J.;
RT "Post-translational hydroxylation at the N-terminus of the prion
RT protein reveals presence of PrP structure in vivo.";
RL EMBO J. 19:5324-5331(2000).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
host genome and is expressed both in normal and infected cells.

```

```

CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Found in high quantity in the brain of humans and animals
CC infected with degenerative neurological diseases such as kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: M18070; AAA39997.1; -
DR EMBL: M18071; AAA39998.1; -
DR EMBL: M13685; AAA39996.1; -
DR EMBL: U29186; AAC02804.1; -
DR EMBL: BC006703; AAH06703.1; -
DR EMBL: M30384; AA39999.1; -
DR PIR: A29669; A23544.
DR PDB: 1AG2; NMR; @=123-225.
DR MGD; MGI:97769; Prnp.
DR GO: GO:0005793; C:endooplasmic reticulum; IDA.
DR GO: GO:0005794; C:Golgi apparatus; IDA.
DR GO: GO:0045121; C:lipid raft; IDA.
DR GO: GO:0005507; F:copper ion binding; IDA.
DR GO: GO:0006979; P:response to oxidative stress; IDA.
DR InterPro: IPR00817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR 3D-structure: Glycoprotein; GPI-anchor; Hydroxylation; Lipoprotein;
DR Polymorphism: Prion; Repeat; Signal.
DR SIGNAL: 1 22
DR CHAIN: 23 230
DR PROPE: 231 254
DR MOD_RES: 44 44
DR LIPID: 230 230
DR CARBOHYD: 180 180
DR CARBOHYD: 196 196
DR DISULFID: 178 213
DR DOMAIN: 51 90
DR REPEAT: 51 58
DR REPEAT: 59 66
DR REPEAT: 67 74
DR REPEAT: 75 82
DR REPEAT: 83 90
DR VARIANT: 108 108
DR VARIANT: 189 189
DR CONFLICT: 133 133
DR TURN: 124 126
DR STRAND: 128 129
DR STRAND: 143 152
DR TURN: 153 155
DR TURN: 161 162
DR HELIX: 171 191
DR TURN: 192 194
DR HELIX: 199 221
DR TURN: 222 224
DR SEQUENCE: 254 AA; 27977 MW; D5331B6321826CC0 CRC64;
Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 5e-22;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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OY 1 NNONFVHDCVNIITIKQHTVTTTGTGNTFETDVKKMERVBEQMCV 46
DB 169 SNOQNVFHDVCVNIITIKQHTVTTTGTGNTFETDVKKMERVBEQMCV 214
RESULT 14
PRIO RAT STANDARD; PRT; 254 AA.
AC P13852;
DT 01-JAN-1990 (Rel. 13, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUN-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp).
GN Name=Prnp; Synonyms=Prn;
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Zitter, and SJ/D, TISSUE=Liver;
RX MEDLINE=94232539; PubMed=7909925;
RA Gomi H., Ikeda T., Kunieda T., Itohara S., Prusiner S.B.,
RA Yamamouchi K.;
RT "Prion protein (Prp) is not involved in the pathogenesis of spongiform
RT encephalopathy in Zitter rats.";
RL Neurosci. Lett. 166:171-174(1994).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Wistar; TISSUE=Liver;
RX MEDLINE=97033369; PubMed=8879116;
RA Sasaki K., Matsumoto Y., Hirota Y., Matsumoto Y., Onodera T.;
RT "Three-exon structure of the gene encoding the rat prion protein and
RT its expression in tissues.";
RL Virus Genes 12:15-20(1996).
RN [3]
RP SEQUENCE OF 29-254 FROM N.A.
RX MEDLINE=88037055; PubMed=2889848;
RA Liao Y.-C., Tokes Z., Lim E., Lackey A., Woo C.H., Button J.D.,
RA Clawson G.A.;
RT "Cloning of rat 'prion-related protein' cDNA.";
RL Lab. Invest. 57:370-374(1987).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rode".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Found in high quantity in the brain of humans and animals
CC infected with degenerative neurological diseases such as kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@1sb-sib.ch).
CC -----
DR EMBL: S69654; AAB30728.2; -
DR EMBL: D50093; BAA08790.1; -
DR EMBL: M20313; AAA41947.1; -
DR PIR: A53882; A53882.
DR HSSP: P04925; 1AG2.
DR RGD: 3410; Prnp.
DR InterPro: IPR00817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.

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DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT SIGNAL 1 28 Potential.
 FT CHAIN 29 231 Major prion protein.
 FT PROPEP 232 254 Removed in mature form (By similarity).
 FT LIPID 231 231 GPI-anchor amidated serine (By
 FT similarity).
 FT CARBOHYD 181 181 N-linked (GlcNAc...) (Probable).
 FT CARBOHYD 197 197 N-linked (GlcNAc...) (Probable).
 FT DISULFID 179 214 By similarity.
 FT DOMAIN 51 91 5 x 8 AA tandem repeats of P-H-G-G-G-W-G-
 FT 0.
 FT REPEAT 51 59 1.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT REPEAT 76 83 4.
 FT REPEAT 84 91 5.
 FT REPEAT 84 91 5.
 SQ SEQUENCE 254 AA; 27804 MW; 28FA24D13BEFA2C6 CRC64;

Query Match 98.0%; Score 241; DB 1; Length 254;
 Best Local Similarity 97.8%; Pred. No. 5e-22; 0; Indels 0; Gaps 0;
 Matches 45; Conservative 1; Mismatches 0;

QY 1 NNONNFVHDCVNITIKQHTVTTTKGKNTETDVKMERVVEQMCV 46
 :|||||
 DB 170 SNONNFVHDCVNITIKQHTVTTTKGKNTETDVKMERVVEQMCV 215

RESULT 15

OSVHV6 PRELIMINARY; PRT; 254 AA.
 ID OSVHV6.
 AC 01-MAR-2002 (TrEMBLrel. 20, Created)
 DT 01-MAR-2002 (TrEMBLrel. 20, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Prion protein.
 GN Name=PrP;
 OS Apodemus sylvaticus (European woodmouse).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 OC Apodemus.
 OC NCBI_TaxID=10129;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nomo R.,
 Di Garbo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
 Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.
 RL -1- SIMILARITY: Belongs to the prion family.
 CC EMBL; AF367623; AAL57230.1; --.
 CC HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Prion.
 SQ SEQUENCE 254 AA; 27857 MW; CB2B5658C47A8885 CRC64;

Query Match 98.0%; Score 241; DB 2; Length 254;
 Best Local Similarity 97.8%; Pred. No. 5e-22;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNONNFVHDCVNITIKQHTVTTTKGKNTETDVKMERVVEQMCV 46
 :|||||
 DB 170 SNONNFVHDCVNITIKQHTVTTTKGKNTETDVKMERVVEQMCV 215

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(Without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
Sequence: 1 NNQNNFVHDCVNTTKKHQHTV.....ENFTDVKMERVVEQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2_6/prodata/1/iaa/5A COMB pep: *
2: /cgn2_6/prodata/1/iaa/5B COMB pep: *
3: /cgn2_6/prodata/1/iaa/6A COMB pep: *
4: /cgn2_6/prodata/1/iaa/6B COMB pep: *
5: /cgn2_6/prodata/1/iaa/PTUS COMB pep: *
6: /cgn2_6/prodata/1/iaa/backfile1 pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	246	100.0	254 4 US-09-431-887-23	Sequence 23, Appl
2	245	99.6	252 4 US-09-431-887-13	Sequence 13, Appl
3	241	98.0	254 1 US-08-242-188-1	Sequence 1, Appl
4	241	98.0	254 1 US-08-509-261A-1	Sequence 1, Appl
5	241	98.0	254 1 US-08-660-626-7	Sequence 7, Appl
6	241	98.0	254 1 US-08-692-892-1	Sequence 1, Appl
7	241	98.0	254 2 US-08-713-939A-1	Sequence 1, Appl
8	241	98.0	254 2 US-08-868-162A-21	Sequence 21, Appl
9	241	98.0	254 3 US-09-031-168-7	Sequence 7, Appl
10	241	98.0	254 3 US-09-128-450-19	Sequence 19, Appl
11	241	98.0	254 3 US-09-128-450-28	Sequence 28, Appl
12	241	98.0	254 3 US-09-036-579-1	Sequence 1, Appl
13	241	98.0	254 3 US-09-823-494-19	Sequence 19, Appl
14	241	98.0	254 3 US-09-823-494-28	Sequence 28, Appl
15	241	98.0	254 3 US-09-550-374-1	Sequence 1, Appl
16	241	98.0	254 4 US-09-431-887-20	Sequence 20, Appl
17	241	98.0	254 4 US-09-431-887-21	Sequence 21, Appl
18	241	98.0	254 4 US-09-627-218B-10	Sequence 10, Appl
19	241	98.0	254 4 US-09-943-906-1	Sequence 1, Appl
20	241	98.0	254 4 US-09-668-516C-7	Sequence 7, Appl
21	240	97.6	142 1 US-08-556-823-10	Sequence 10, Appl
22	240	97.6	245 4 US-09-431-887-5	Sequence 5, Appl
23	240	97.6	245 4 US-09-431-887-15	Sequence 15, Appl
24	240	97.6	252 4 US-09-431-887-17	Sequence 17, Appl
25	240	97.6	253 1 US-08-242-188-2	Sequence 2, Appl
26	240	97.6	253 1 US-08-509-261A-2	Sequence 2, Appl
27	240	97.6	253 1 US-08-660-626-8	Sequence 8, Appl

28	240	97.6	253 1 US-08-692-892-2	Sequence 2, Appl
29	240	97.6	253 2 US-08-713-939A-2	Sequence 2, Appl
30	240	97.6	253 2 US-08-868-162A-22	Sequence 22, Appl
31	240	97.6	253 3 US-09-031-168-8	Sequence 8, Appl
32	240	97.6	253 3 US-09-128-450-20	Sequence 20, Appl
33	240	97.6	253 3 US-09-036-579-2	Sequence 2, Appl
34	240	97.6	253 3 US-09-823-494-20	Sequence 20, Appl
35	240	97.6	253 3 US-09-550-374-2	Sequence 2, Appl
36	240	97.6	253 4 US-09-431-887-11	Sequence 1, Appl
37	240	97.6	253 4 US-09-431-887-3	Sequence 3, Appl
38	240	97.6	253 4 US-09-431-887-4	Sequence 4, Appl
39	240	97.6	253 4 US-09-431-887-7	Sequence 7, Appl
40	240	97.6	253 4 US-09-431-887-9	Sequence 9, Appl
41	240	97.6	253 4 US-09-431-887-10	Sequence 10, Appl
42	240	97.6	253 4 US-09-431-887-11	Sequence 11, Appl
43	240	97.6	253 4 US-09-431-887-12	Sequence 12, Appl
44	240	97.6	253 4 US-09-431-887-14	Sequence 14, Appl
45	240	97.6	253 4 US-09-431-887-16	Sequence 16, Appl

ALIGNMENTS

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RESULT 1
US-09-431-887-23
Sequence 23, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOP/P21952
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 23
LENGTH: 254
TYPE: PRT
ORGANISM: Mesocricetus auratus
US-09-431-887-23

Query Match      100.0%; Score 246; DB 4; Length 254;
Best Local Similarity 100.0%; Pred. No. 7.3e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy      1 NNQNNFVHDCVNTTKKHQHTVTTTGGNFTETDVKMERVVEQMCV 46
Db      170 NNQNNFVHDCVNTTKKHQHTVTTTGGNFTETDVKMERVVEQMCV 215

RESULT 2
US-09-431-887-13
Sequence 13, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
FILE REFERENCE: ICOP/P21952
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 13
LENGTH: 252
TYPE: PRT
ORGANISM: Callithrix sp.
US-09-431-887-13
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Query Match 99.6%; Score 245; DB 4; Length 252;
Best Local Similarity 97.8%; Pred. No. 1e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFTEITDVKMMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFTEITDVKMMERVVEQMCV 214

RESULT 3

US-08-242-188-1
Sequence 1, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-242-188-1

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFTEITDVKMMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFTEITDVKMMERVVEQMCV 214

RESULT 4

US-08-509-261A-1
Sequence 1, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Method of Detecting Prions

TITLE OF INVENTION: in a Sample and Transgenic Animal used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bosicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-1

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFTEITDVKMMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFTEITDVKMMERVVEQMCV 214

RESULT 5

US-08-660-626-7
Sequence 7, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascliti
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:

CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrp
US-08-660-626-7

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 214

RESULT 6
US-08-692-892-1
Sequence 1, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn R.
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrp
US-08-692-892-1

Query Match 98.0%; Score 241; DB 1; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 214

RESULT 7
US-08-713-939A-1
Sequence 1, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/713,939A

FILING DATE: 13-SEP-1996

CLASSIFICATION: 436

PRIOR APPLICATION NUMBER:

APPLICATION NUMBER:

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875

TELEX:

INFORMATION FOR SEQ ID NO: 1:

SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-713-939A-1

Query Match 98.0%; Score 241; DB 2; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 46
DB 169 SNQNNFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQMCV 214

RESULT 8

US-08-868-162A-21

Sequence 21, Application US/08868162A

Patent No. 5962669

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley

APPLICANT: Cohen, Fred

APPLICANT: James, Thomas

APPLICANT: Kaneke, Kiyotoshi

TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fastseq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 21:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-08-868-162A-21

Query Match
Best Local Similarity 98.0%; Score 241; DB 2; Length 254;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNQNNFVHDCVNTTIKQHTVTTTKGNTFTDVKMERVVEQMCV 46
169 SNQNNFVHDCVNTTIKQHTVTTTKGNTFTDVKMERVVEQMCV 214

RESULT 9
US-09-031-168-7
Sequence 7, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSES: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: ASCII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: MOUSE PRION PROTEIN, MoPrP
US-09-031-168-7

Query Match
Best Local Similarity 98.0%; Score 241; DB 3; Length 254;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNQNNFVHDCVNTTIKQHTVTTTKGNTFTDVKMERVVEQMCV 46
169 SNQNNFVHDCVNTTIKQHTVTTTKGNTFTDVKMERVVEQMCV 214

RESULT 10
US-09-128-450-19
Sequence 19, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
TITLE OF INVENTION: Protein
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-19

Query Match
Best Local Similarity 98.0%; Score 241; DB 3; Length 254;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 1 NNQNNFVHDCVNTTIKQHTVTTTKGNTFTDVKMERVVEQMCV 46
169 SNQNNFVHDCVNTTIKQHTVTTTKGNTFTDVKMERVVEQMCV 214

RESULT 11
US-09-128-450-28
Sequence 28, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W

APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO: 28
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-128-450-28

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 12
US-09-036-579-1
Sequence 1, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-1

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 13
US-09-823-494-19
Sequence 19, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO: 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-823-494-19

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 14
US-09-823-494-28
Sequence 28, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO: 28
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus
US-09-823-494-28

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
Db 169 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 214

RESULT 15

US-09-550-374-1
; Sequence 1, Application US/09550374
; Patent No. 6372214
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williamson, R. Anthony
; APPLICANT: Burton, Dennis R.
; TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
; NUMBER OF SEQUENCES: 86
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson P.C.
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Fast-Seq Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/550,374
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 09/036,579
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/059001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-5277
; TELEFAX: 415-854-0875
; TELEX:
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 254 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; US-09-550-374-1

Query Match 98.0%; Score 241; DB 3; Length 254;
Best Local Similarity 97.8%; Pred. No. 3.6e-25;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNQNNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMERVVEQMCV 46
:|||||
Db 169 SNQNNFVHDCVNTTIKQHTVTTTKGENFTETDVKKMERVVEQMCV 214

Search completed: December 3, 2004, 00:18:58
Job time : 18.4197 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-23_COPY_176_221

Perfect score: 246
Sequence: 1 NNQNNFVHDCVNTIKQHTV.....ENFTEDVQKMERVVEQMCV 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

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19: /cgn2_6/ptodata/1/pubppa/US60_NEW_PUB.pep:*
20: /cgn2_6/ptodata/1/pubppa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	246	100.0	254	US-10-304-630-23	Sequence 23, Appl
2	246	100.0	254	US-10-410-907A-6	Sequence 6, Appl
3	246	100.0	254	US-10-410-907A-7	Sequence 7, Appl
4	245	99.6	252	US-10-304-630-13	Sequence 13, Appl
5	241	98.0	124	US-10-050-902-324	Sequence 324, App
6	241	98.0	124	US-10-050-898-324	Sequence 324, App
7	241	98.0	124	US-10-346-190-93	Sequence 93, Appl
8	241	98.0	164	US-09-745-003-12	Sequence 12, Appl
9	241	98.0	209	US-10-470-848-6	Sequence 6, Appl
10	241	98.0	209	US-10-470-848-7	Sequence 7, Appl
11	241	98.0	225	US-10-301-488A-25	Sequence 25, Appl
12	241	98.0	225	US-10-301-448-25	Sequence 25, Appl
13	241	98.0	226	US-10-205-194-121	Sequence 121, App

14	241	98.0	254	9	US-09-823-494-19	Sequence 19, Appl
15	241	98.0	254	9	US-09-823-494-28	Sequence 28, Appl
16	241	98.0	254	9	US-09-943-906-1	Sequence 1, Appl
17	241	98.0	254	13	US-10-106-574-5	Sequence 5, Appl
18	241	98.0	254	13	US-10-106-574-6	Sequence 6, Appl
19	241	98.0	254	13	US-10-106-574-7	Sequence 7, Appl
20	241	98.0	254	13	US-10-106-574-8	Sequence 8, Appl
21	241	98.0	254	14	US-10-355-760-10	Sequence 10, Appl
22	241	98.0	254	14	US-10-304-630-20	Sequence 20, Appl
23	241	98.0	254	14	US-10-304-630-21	Sequence 21, Appl
24	241	98.0	254	14	US-10-301-488A-24	Sequence 24, Appl
25	241	98.0	254	14	US-10-410-907A-9	Sequence 9, Appl
26	241	98.0	254	14	US-10-346-190-87	Sequence 87, Appl
27	241	98.0	254	14	US-10-435-602-1	Sequence 1, Appl
28	241	98.0	254	15	US-10-438-628-2	Sequence 2, Appl
29	241	98.0	254	15	US-10-301-448-24	Sequence 24, Appl
30	241	98.0	254	16	US-10-470-848-9	Sequence 9, Appl
31	241	98.0	255	16	US-10-470-848-5	Sequence 5, Appl
32	241	98.0	350	14	US-10-050-902-323	Sequence 323, App
33	241	98.0	350	14	US-10-050-898-323	Sequence 323, App
34	241	98.0	350	14	US-10-346-190-92	Sequence 92, Appl
35	241	98.0	439	13	US-10-115-984-2	Sequence 2, Appl
36	240	97.6	117	14	US-10-050-902-348	Sequence 348, App
37	240	97.6	117	14	US-10-050-898-348	Sequence 348, App
38	240	97.6	117	14	US-10-346-190-89	Sequence 89, Appl
39	240	97.6	141	16	US-10-612-356A-1	Sequence 1, Appl
40	240	97.6	162	9	US-09-745-003-10	Sequence 10, Appl
41	240	97.6	163	14	US-10-104-047-2013	Sequence 2013, Ap
42	240	97.6	200	16	US-10-470-848-10	Sequence 10, Appl
43	240	97.6	208	16	US-10-470-848-3	Sequence 3, Appl
44	240	97.6	208	17	US-10-745-393-1	Sequence 1, Appl
45	240	97.6	245	14	US-10-304-630-5	Sequence 5, Appl

ALIGNMENTS

RESULT 1
US-10-304-630-23
; Sequence 23, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/10/304,630
; PRIOR FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Mesocricetus auratus
; US-10-304-630-23

Query Match 100.0%; Score 246; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 7.6e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1 NNQNNFVHDCVNTIKQHTVTTTGGNFTEDVQKMERVVEQMCV 46
Db 170 NNQNNFVHDCVNTIKQHTVTTTGGNFTEDVQKMERVVEQMCV 215
RESULT 2
US-10-410-907A-6
; Sequence 6, Application US/10410907A
; Publication No. US20030215860A1

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/ GENERAL INFORMATION:
/ APPLICANT: Dennis R. Burton
/ APPLICANT: G. Ianluca Moroncini
/ TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
/ FILE REFERENCE: 22908-1229
/ CURRENT APPLICATION NUMBER: US/10/410,907A
/ PRIOR FILING DATE: 2003-04-08
/ PRIOR APPLICATION NUMBER: 60/371,610
/ NUMBER OF SEQ ID NOS: 36
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 6
/ LENGTH: 254
/ TYPE: PRT
/ ORGANISM: Mesocricetus auratus (Armenian hamster)
US-10-410-907A-6
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Query Match          100.0%; Score 246; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 7,6e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 170 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 215
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RESULT 3
US-10-410-907A-7
/ Sequence 7, Application US/0410907A
/ Publication No. US20030215880A1
/ GENERAL INFORMATION:
/ APPLICANT: Dennis R. Burton
/ APPLICANT: R. Anthony Williamson
/ APPLICANT: G. Ianluca Moroncini
/ TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
/ FILE REFERENCE: 22908-1229
/ CURRENT APPLICATION NUMBER: US/10/410,907A
/ PRIOR FILING DATE: 2003-04-08
/ PRIOR APPLICATION NUMBER: 60/371,610
/ NUMBER OF SEQ ID NOS: 36
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 7
/ LENGTH: 254
/ TYPE: PRT
/ ORGANISM: Cricetus griseus (Chinese hamster)
US-10-410-907A-7
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Query Match          100.0%; Score 246; DB 14; Length 254;
Best Local Similarity 100.0%; Pred. No. 7,6e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 170 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 215
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RESULT 4
US-10-304-630-13
/ Sequence 13, Application US/10304630
/ Publication No. US20030161836A1
/ GENERAL INFORMATION:
/ APPLICANT: D-gen Limited
/ TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
/ FILE REFERENCE: ICOT/P21952
/ CURRENT APPLICATION NUMBER: US/10/304,630
/ PRIOR FILING DATE: 2002-11-26
/ PRIOR APPLICATION NUMBER: US/09/431,887
/ PRIOR FILING DATE: 1999-11-02
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/ PRIOR APPLICATION NUMBER: GB 9824091.4
/ PRIOR FILING DATE: 1999-11-04
/ NUMBER OF SEQ ID NOS: 37
/ SOFTWARE: PatentIn Ver. 2.0
/ SEQ ID NO 13
/ LENGTH: 252
/ TYPE: PRT
/ ORGANISM: Callithrix sp.
US-10-304-630-13
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Query Match          99.6%; Score 245; DB 14; Length 252;
Best Local Similarity 97.8%; Pred. No. 1e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
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QY 1 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 46
DB 169 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 214
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RESULT 5
US-10-050-902-324
/ Sequence 324, Application US/10050902
/ Publication No. US20030175290A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tisoe, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Sebbel, Peter
/ TITLE OF INVENTION: Molecular Antigen Array
/ FILE REFERENCE: 1700.0190004
/ CURRENT APPLICATION NUMBER: US/10/050,902
/ PRIOR FILING DATE: 2002-01-18
/ PRIOR APPLICATION NUMBER: US 60/262,379
/ PRIOR FILING DATE: 2001-01-19
/ PRIOR APPLICATION NUMBER: US 60/288,549
/ PRIOR FILING DATE: 2001-05-04
/ PRIOR APPLICATION NUMBER: US 60/326,998
/ PRIOR FILING DATE: 2001-10-05
/ PRIOR APPLICATION NUMBER: US 60/331,045
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 350
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 324
/ LENGTH: 124
/ TYPE: PRT
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: mPrp construct
US-10-050-902-324
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Query Match          98.0%; Score 241; DB 14; Length 124;
Best Local Similarity 97.8%; Pred. No. 1.4e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
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DB 50 NNNNNFVHDCVNITIKOHTVTTTGGNFETDVKMMERVVEQMCV 95
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RESULT 6
US-10-050-898-324
/ Sequence 324, Application US/10050898
/ Publication No. US2003015711A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tisoe, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Sebbel, Peter
```



```

; APPLICANT: Plosek, Christine
; APPLICANT: Ortmann, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staufenbiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Protein sequence of mPrPc
; US-10-050-898-324

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Query Match          98.0%; Score 241; DB 14; Length 124;
Best Local Similarity 97.8%; Pred. No. 1.4e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
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Db 50 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 95

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RESULT 7
; US-10-346-190-93
; Sequence 93, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 93
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrPc
; US-10-346-190-93

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Query Match          98.0%; Score 241; DB 14; Length 124;
Best Local Similarity 97.8%; Pred. No. 1.4e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
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Db 50 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 95

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RESULT 8
; US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PrP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
; US-09-745-003-12

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Query Match          98.0%; Score 241; DB 9; Length 164;
Best Local Similarity 97.8%; Pred. No. 2e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Db 79 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 124

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RESULT 9
; US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: C1M-type prion protein
; US-10-470-848-6

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Query Match          98.0%; Score 241; DB 16; Length 209;
Best Local Similarity 97.8%; Pred. No. 2.7e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 NNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 46
:|||||
Db 148 SNQNNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQMCV 193

```

```

RESULT 10
; US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31

```

PRIOR APPLICATION NUMBER: JP 2001-24279
PRIOR FILING DATE: 2001-01-31
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7
LENGTH: 209
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURES:
OTHER INFORMATION: Description of Artificial Sequence: Chv type prion protein
US-10-470-848-7

Query Match 98.0%; Score 241; DB 16; Length 209;
Best Local Similarity 97.8%; Pred. No. 2.7e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 148 SNONNFVHDCVNITIKQHTVTTTGGNFETEDVGMERVVEQMCV 193

RESULT 11
US-10-301-488A-25
Sequence 25, Application US/10301488A
GENERAL INFORMATION:
APPLICANT: FRANGIONE, Blas
APPLICANT: WISNIEMSKI, Thomas
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
TITLE OF INVENTION: IMMUNE RESPONSE THERETO
FILE REFERENCE: 5986/1K434US1
CURRENT APPLICATION NUMBER: US/10/301,488A
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 60/331,801
PRIOR FILING DATE: 2001-11-21
NUMBER OF SEQ ID NOS: 55
SOFTWARE: PatentIn version 3.1
SEQ ID NO 25
LENGTH: 225
TYPE: PRT
ORGANISM: Rat
US-10-301-488A-25

Query Match 98.0%; Score 241; DB 14; Length 225;
Best Local Similarity 97.8%; Pred. No. 3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 142 SNONNFVHDCVNITIKQHTVTTTGGNFETEDVGMERVVEQMCV 187

RESULT 12
US-10-301-448-25
Sequence 25, Application US/10301448
GENERAL INFORMATION:
APPLICANT: FRANGIONE, Blas
APPLICANT: WISNIEMSKI, Thomas
TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
TITLE OF INVENTION: IMMUNE RESPONSE THERETO
FILE REFERENCE: 5986/1K434US1
CURRENT APPLICATION NUMBER: US/10/301,448
CURRENT FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: US 60/331,801
PRIOR FILING DATE: 2001-11-21
NUMBER OF SEQ ID NOS: 55

SOFTWARE: PatentIn version 3.1
SEQ ID NO 25
LENGTH: 225
TYPE: PRT
ORGANISM: Rat
US-10-301-448-25

Query Match 98.0%; Score 241; DB 15; Length 225;
Best Local Similarity 97.8%; Pred. No. 3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 142 SNONNFVHDCVNITIKQHTVTTTGGNFETEDVGMERVVEQMCV 187

RESULT 13
US-10-205-194-121
Sequence 121, Application US/10205194
GENERAL INFORMATION:
APPLICANT: Warner-Lambert Company
APPLICANT: Lee, Kevin
APPLICANT: Dixon, Alistair
APPLICANT: Brooksbank, Robert
TITLE OF INVENTION: Identification and Use of Molecules Implicated in Pain
FILE REFERENCE: WL-A-018201
CURRENT APPLICATION NUMBER: US/10/205,194
CURRENT FILING DATE: 5200-07-24
PRIOR APPLICATION NUMBER: GB 0118354.0
PRIOR FILING DATE: 2001-07-27
NUMBER OF SEQ ID NOS: 177
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 121
LENGTH: 226
TYPE: PRT
ORGANISM: Rattus norvegicus
OTHER INFORMATION: PRP
US-10-205-194-121

Query Match 98.0%; Score 241; DB 14; Length 226;
Best Local Similarity 97.8%; Pred. No. 3e-23;
Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Db 142 SNONNFVHDCVNITIKQHTVTTTGGNFETEDVGMERVVEQMCV 187

RESULT 14
US-09-823-494-19
Sequence 19, Application US/09823494
GENERAL INFORMATION:
APPLICANT: Chesebrough, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 19
LENGTH: 254
TYPE: PRT
ORGANISM: Mus musculus

US-09-823-494-19

Query Match 98.0%; Score 241; DB 9; Length 254;
 Best Local Similarity 97.8%; Pred. No. 3.4e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMCV 46
 :|||||
 DB 169 SNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMCV 214

RESULT 15

US-09-823-494-28
 ; Sequence 28; Application US/09823494
 ; Publication No. US20010041790A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Chesedro, Bruce W
 ; APPLICANT: Caughey, Byron W
 ; APPLICANT: Chabry, Joelle
 ; APPLICANT: Priola, Suelette
 ; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
 ; FILE REFERENCE: 50121
 ; CURRENT APPLICATION NUMBER: US/09/823,494
 ; CURRENT FILING DATE: 2001-03-30
 ; PRIOR APPLICATION NUMBER: 09/128,450
 ; PRIOR FILING DATE: 1998-08-03
 ; NUMBER OF SEQ ID NOS: 29
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 28
 ; LENGTH: 254
 ; TYPE: PRT
 ; ORGANISM: Mus musculus
 US-09-823-494-28

Query Match 98.0%; Score 241; DB 9; Length 254;
 Best Local Similarity 97.8%; Pred. No. 3.4e-23;
 Matches 45; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMCV 46
 :|||||
 DB 169 SNNNNFVHDCVNTTIKQHTVTTTGGNFETDVKMMERVVEQMCV 214

Search completed: December 3, 2004, 01:07:47
 Job time : 55.4459 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214
Perfect score: 193
Sequence: 1 NNFVHDCVNTTKQHTVTTTKGSENFTEIDVKMMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seque, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_23Sep04.*
1: geneseqp1980s.*
2: geneseqp1990s.*
3: geneseqp2000s.*
4: geneseqp2001s.*
5: geneseqp2002s.*
6: geneseqp2003as.*
7: geneseqp2003bs.*
8: geneseqp2004as.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	117	5	ABG94357 Modified
2	193	100.0	117	5	ABG80669 Human pri
3	193	100.0	117	7	ADD24196 Modified
4	193	100.0	124	5	ABG94340 Mouse mpr
5	193	100.0	124	5	ABG80652 Mouse cru
6	193	100.0	124	7	ADD24200 mPrP-EK
7	193	100.0	142	7	AAW17686 Prion pro
8	193	100.0	163	7	ADB63859 Human pro
9	193	100.0	200	5	ABG31907 Human pri
10	193	100.0	208	3	AAW07316 Mouse pri
11	193	100.0	208	3	AAW07318 Human pri
12	193	100.0	208	3	AAW07327 Mouse pri
13	193	100.0	208	3	AAW07329 Human pri
14	193	100.0	208	5	ABG31902 Human pri
15	193	100.0	208	5	ABG31904 Chimera-t
16	193	100.0	208	7	ADJ66133 Mouse pri
17	193	100.0	209	5	ABG31905 Hciv type
18	193	100.0	211	4	AAW30801 Amino aci
19	193	100.0	225	6	ABR42793 Rat prion
20	193	100.0	226	7	ADB85240 Monkey pr
21	193	100.0	245	4	AAW72342 Cercopit
22	193	100.0	245	4	AAW72352 Cercopit
23	193	100.0	253	2	AAW86715 Human pri
24	193	100.0	253	2	AAW69660 Human pri
25	193	100.0	253	2	AAW85901 Human pri

26	193	100.0	253	2	AAW07994 Human pri
27	193	100.0	253	3	AAW81485 Human pri
28	193	100.0	253	3	AAW06272 Human pri
29	193	100.0	253	3	AAW15035 Human pri
30	193	100.0	253	4	AAW72339 Chimpanze
31	193	100.0	253	4	AAW72347 Prion pro
32	193	100.0	253	4	AAW72353 Guezeza p
33	193	100.0	253	4	AAW72344 Rhesus mo
34	193	100.0	253	4	AAW72345 Gibbon pr
35	193	100.0	253	4	AAW72350 Marmoset
36	193	100.0	253	4	AAW72351 Hamadryas
37	193	100.0	253	4	AAW72348 Prion pro
38	193	100.0	253	4	AAW72356 Stiamang p
39	193	100.0	253	4	AAW72346 Prion pro
40	193	100.0	253	4	AAW72355 Prion pro
41	193	100.0	253	4	AAW72349 Prion pro
42	193	100.0	253	4	AAW72340 Orangutan
43	193	100.0	253	4	AAW72338 Human pri
44	193	100.0	253	4	AAW72354 Capuchin
45	193	100.0	253	4	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ABG94357
ID ABG94357 standard; protein; 117 AA.
XX
AC ABG94357;
XX
DT 10-DEC-2002 (first entry)
XX
DE Modified human prion protein fragment.
XX
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KM cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KM vaccine; infectious disease.
XX
OS Homo sapiens.
XX
PN W0200256905-A2.
XX
PD 25-JUL-2002.
XX
PF 21-JAN-2002; 2002MO-IB000166.
XX
PR 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326998P.
PR 07-NOV-2001; 2001US-031045P.
XX
PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Sebbel P;
P1 Piossek C;
XX
DR WPI; 2002-627351/67.
XX
PT Molecular antigen array used in the production of vaccines for infectious
XX diseases.
XX
PS Disclosure; Page 441; 441pp; English.
XX
CC This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide

Query	Database	Accession	Score	DB	Length	Mismatches	Conservative	Indels	Gaps
1	1	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
2	2	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
3	3	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
4	4	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
5	5	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
6	6	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
7	7	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
8	8	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
9	9	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
10	10	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
11	11	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
12	12	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
13	13	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
14	14	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
15	15	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
16	16	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
17	17	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
18	18	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
19	19	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
20	20	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
21	21	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
22	22	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
23	23	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
24	24	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
25	25	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
26	26	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
27	27	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
28	28	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
29	29	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
30	30	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
31	31	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
32	32	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
33	33	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
34	34	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
35	35	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
36	36	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
37	37	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
38	38	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
39	39	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
40	40	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
41	41	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0
42	42	NNFVHDCVNIITIKOHTVTTTKGKGFETDYMNER	100.0%	193	117	36	0	0	0

PI Renner WA, Bachmann M, Tisect A, Seibel P, Ploessek C;
 DR WPI; 2002-636514/68.
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 418; 418pp; English.
 XX
 XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment; and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact.
 CC Through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for allergic reactions, anaphylaxis, adult
 CC versus host disease, Igg-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX
 XX Sequence 117 AA;
 SQ
 Query Match 100.0%; Score 193; DB 5; Length 117;
 Beel Local Similarity 100.0%; Pred. No. 7, 5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNPFVDCVNTIKOHTVTTTITKGFNPETDVKKMER 36
 Db 52 NNPFVDCVNTIKOHTVTTTITKGFNPETDVKKMER 87
 RESULT 3
 ADD24196
 ID ADD24196 standard; protein; 117 AA.
 XX
 XX ADD24196;
 DT 15-JAN-2004 (first entry)
 DE Modified human prion protein amino acid sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mutant; mutein.
 XX
 OS Synthetic.
 OS prion.
 XX
 XX WO2003059386-A2.

PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 XX 21-JAN-2002; 2002WO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 DR
 XX A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 89; 246bp; English.
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC human prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 XX
 SQ Sequence 117 AA;
 Query Match 100.0%; Score 193; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 Db 52 NNPFVHDCVNITIKOHTVTTTGGNFETDVKKMER 87
 RESULT 4
 ABG94340
 ID ABG94340 standard; protein; 124 AA.
 XX
 AC ABG94340;
 XX
 DT 10-DEC-2002 (first entry)
 XX
 DE Mouse mPrPc protein.
 XX
 XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
 KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
 KW vaccine; infectious disease.
 XX
 OS Mus sp.
 XX
 FN WO200256905-A2.
 XX
 PD 25-JUL-2002.
 XX
 XX 21-JAN-2002; 2002WO-IB000166.
 PF 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Renner WA, Bachmann M, Tisot A, Maurer P, Lechner F, Sebbel P;
 PI Plosser C;
 XX
 DR WPI; 2002-627351/67.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Disclosure; Page 438; 441pp; English.
 CC This invention relates to a novel ordered and repetitive antigen array
 CC used in the production of vaccines for infectious diseases. The invention
 CC also discloses a composition comprising a non-natural molecular scaffold
 CC comprising a core particle selected from a core particle of a non-natural
 CC origin and a core particle of natural origin and an organiser comprising
 CC at least one first attachment site, where the organiser is connected to
 CC the core particle by at least one covalent bond. Also disclosed is an
 CC antigen or antigenic determinant with at least one second attachment
 CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (A β 1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant β subunit coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytosolic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX
 SQ Sequence 124 AA;
 Query Match 100.0%; Score 193; DB 5; Length 124;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNPFVHDCVNITIKOHTVTTTGGNFETDVKKMER 36
 Db 53 NNPFVHDCVNITIKOHTVTTTGGNFETDVKKMER 88
 RESULT 5
 ABG80652
 ID ABG80652 standard; protein; 124 AA.
 XX
 AC ABG80652;
 XX
 DT 29-NOV-2002 (first entry)
 XX
 DE Mouse truncated prion protein with C terminal cysteine containing linker.
 XX
 XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KW molecular scaffold; amyloid beta; A β 1-42; influenza; murein;
 KW graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
 KW adult respiratory distress syndrome; ARDS; Crohn's disease;
 KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KW Grave's disease; systemic lupus erythematosus; osteoporosis;
 KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KW angiointerferative disease; lymphadenopathy; Alzheimer's disease;
 KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KW rheumatoid arthritis; diabetes; infectious diseases; factor Xa;
 KW enurokinase; cysteine-containing linker.
 XX
 OS Mus sp.
 XX
 OS Synthetic.
 XX

PN WO200256907-A2.
 XX
 PD 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002WO-1B000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326598P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUBO/) LUBOEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Luegend P, Straufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Plosssek C;
 XX
 DR WPI; 2002-636514/68.
 XX
 PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 XX
 PS Example 7; Page 415; 418pp; English.
 XX
 CC The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (A-beta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1) an
 CC attaching site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enkephalinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 193; DB 5; Length 124;
 Db Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFDVDCVNIITIKQHTVTTTGTGKGFETEDVYKMER 36
 Db 53 NNFDVDCVNIITIKQHTVTTTGTGKGFETEDVYKMER 88

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 AC 15-JAN-2004 (first entry)
 XX
 DE mPrP-EK-Fc* cleaved protein sequence.
 XX
 KM vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mPrP-EK-Fc*.
 XX
 OS Unidentified.
 OS prion.
 XX
 PN WO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX
 DR WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrP-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 193; DB 7; Length 124;
 Db Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFDVDCVNIITIKQHTVTTTGTGKGFETEDVYKMER 36
 Db 53 NNFDVDCVNIITIKQHTVTTTGTGKGFETEDVYKMER 88

RESULT 7
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KM scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 PN MO9716728-A1.
 XX
 PD 09-MAY-1997.
 XX
 PF 28-OCT-1996; 96MO-US017462.
 XX
 PR 02-NOV-1995; 95US-00556823.
 XX
 PA (REGC) UNIV CALIFORNIA.
 XX
 PI Prusiner SB, Kaneko K, Cohen FE;
 XX
 DR WPI; 1997-272248/24.
 XX
 PT Prion proteins (PrPs) having at least one alpha-helical domain - used in
 PT assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 XX
 PS Claim 11; Page 7-38; 50pp; English.
 XX
 CC The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g. scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 XX
 SQ Sequence 142 AA;
 Query Match 100.0%; Score 193; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 9.4e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 DB 84 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 119
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX
 AC ADB63859;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Human protein encoded by clone ASTR020055570.
 XX
 KM Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KM cell regeneration; membrane protein; signal transduction-related protein;
 KM transcription-related protein; osteoporosis; neurological disease;
 KM cancer; tumour.
 XX
 OS Homo sapiens.
 XX
 PN EP1308459-A2.
 XX
 PD 07-MAY-2003.
 XX
 PF 28-MAR-2002; 2002EP-00007401.
 XX

PR 05-NOV-2001; 2001JP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX
 PA (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Isogami T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Iehi S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX
 XX WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 XX
 PS Claim 1; Page; 222pp; English.
 XX
 CC The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 XX
 SQ Sequence 163 AA;
 Query Match 100.0%; Score 193; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 1.1e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 118
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX
 AC ABG31907;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE Human prion protein related peptide #6.
 XX
 KM Prion; human; follicular dendritic cells; FDC; infection;
 KM blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX
 PN WO200261418-A1.
 XX
 PD 08-AUG-2002.
 XX

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XX 31-JAN-2002; 2002MO-JP000803.
PF 31-JAN-2001; 2001JP-00024279.
PR (TOHO) UNITV TOHOKU.
PA Kitamoto T, Miyoshi K, Mohri S;
PI Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX Example 2; Page 63-64; 69pp; Japanese.
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX drugs for e.g. CJD, as well as for early diagnosis of Creutzfeldt-Jacob
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention.
XX Sequence 200 AA;
XX Query Match 100.0%; Score 193; DB 5; Length 200;
XX Best Local Similarity 100.0%; Pred. No. 1.4e-18; Indels 0; Gaps 0;
XX Matches 36; Conservative 0; Mismatches 0;
XX 1 NNPFVHDCVNITIKOHTVTTTKGENTFTDVKMMER 36
XX 143 NNPFVHDCVNITIKOHTVTTTKGENTFTDVKMMER 178
XX
XX RESULT 10
XX AAB07316
XX ID AAB07316 standard; protein; 208 AA.
XX AC AAB07316;
XX AD 17-OCT-2000 (first entry)
XX DT 17-OCT-2000 (first entry)
XX DE Mouse prion protein sequence.
XX DS Mouse prion protein; transmissible spongiform encephalopathy;
XX KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX OS Mus sp.
XX FH Key Location/Qualifiers
XX FT Region 37..68
XX FT Disulfide-bond 156..191
XX FT Modified-site 208
XX FT /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX PN WO200029850-A1.
XX PD 25-MAY-2000.
XX PF 27-OCT-1999; 99WO-FI000897.
XX PR 17-NOV-1998; 98FI-00002481.
XX PA (WALL-) WALLAC OY.
XX PA (BBSR-) BBSRC OFFICE.

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XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX Novel immunosassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovine.
XX Disclosure; Page 41-42; 50pp; English.
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of Transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an
XX assay of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state.
XX Sequence 208 AA;
XX Query Match 100.0%; Score 193; DB 3; Length 208;
XX Best Local Similarity 100.0%; Pred. No. 1.5e-18; Indels 0; Gaps 0;
XX Matches 36; Conservative 0; Mismatches 0;
XX 1 NNPFVHDCVNITIKOHTVTTTKGENTFTDVKMMER 36
XX 150 NNPFVHDCVNITIKOHTVTTTKGENTFTDVKMMER 185
XX
XX RESULT 11
XX AAB07318
XX ID AAB07318 standard; protein; 208 AA.
XX AC AAB07318;
XX AD 17-OCT-2000 (first entry)
XX DT 17-OCT-2000 (first entry)
XX DE Human prion protein sequence.
XX DS Human prion protein; transmissible spongiform encephalopathy;
XX KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX OS Homo sapiens.
XX FH Key Location/Qualifiers
XX FT Region 29..69
XX FT Disulfide-bond 157..192
XX FT Modified-site 208
XX FT /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX PN WO200029850-A1.
XX PD 25-MAY-2000.
XX PF 27-OCT-1999; 99WO-FI000897.
XX PR 17-NOV-1998; 98FI-00002481.
XX PA (WALL-) WALLAC OY.
XX PA (BBSR-) BBSRC OFFICE.
XX PI Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX Novel immunosassay for prion protein, used for the determination of

```

transmissible spongiform encephalopathies in bovine.

XX Disclosure; Page 43-44; 50pp; English.

PS

XX

CC The present sequence is the human prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,

CC insoluble isoform is implicated in the pathogenesis of Transmissible

CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay

CC of the present invention, in which a PrP epitope is captured by an

CC antibody, which is then detected. The presence of PrP indicates TSE. PrP

CC epitopes (AAB07320-B07326) are derived from the protease resistant core

CC of PrP that is occluded when the PrP is in an aggregated state

CC

XX

SO Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;

Best Local Similarity 100.0%; Pred. No. 1.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36

DB 151 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 186

RESULT 12

AAB07327

ID AAB07327 standard; protein; 208 AA.

XX AAB07327;

AC

XX

DT 17-OCT-2000 (first entry)

XX

DB Mouse prion protein sequence.

XX

XX Mouse; prion protein; transmissible spongiform encephalopathy;

XX bovine spongiform encephalopathy; TSE diagnosis; PrP.

XX

OS Mus sp.

XX

XX Key Location/Qualifiers

XX Region 37..68

XX /note= "Repeat region consisting of tandem repeats of

XX repeat unit: PHGGGWGQ (AAB07319)"

XX Disulfide-bond 156..191

XX Modified-site 208

XX /note= "C-terminal phospho-inositol glycolipid membrane

XX anchor (-GPI)"

XX

XX MO200029849-A1.

XX

PD 25-MAY-2000.

XX

XX 27-OCT-1999; 99WO-FI000896.

XX

XX 17-NOV-1998; 98FI-00002480.

XX

XX (WALL-) WALLAC OY.

XX (BSR-) BBSRC OFFICE.

XX

XX Hope J, Barnard GJR, Birkett CR;

XX

XX WPI; 2000-399778/34.

XX

XX New immunoassay for prion protein, used for determination of

XX transmissible spongiform encephalopathies in mammals, comprises specific

XX capture antibody.

XX

PS Disclosure; Page 41-42; 50pp; English.

XX

XX The present sequence is the mouse prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,

CC insoluble isoform is implicated in the pathogenesis of Transmissible

CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay

CC of the present invention, in which a PrP epitope is captured by an

CC antibody, which is then detected. The presence of PrP indicates TSE. PrP

CC epitopes (AAB07320-B07326) are derived from the protease resistant core

CC of PrP that is occluded when the PrP is in an aggregated state

CC

XX

SO Sequence 208 AA;

Query Match 100.0%; Score 193; DB 3; Length 208;

Best Local Similarity 100.0%; Pred. No. 1.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 36

DB 150 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMER 185

RESULT 13

AAB07329

ID AAB07329 standard; protein; 208 AA.

XX AAB07329;

AC

XX

DT 17-OCT-2000 (first entry)

XX

DE Human prion protein sequence.

XX

XX Human; prion protein; transmissible spongiform encephalopathy;

XX bovine spongiform encephalopathy; TSE diagnosis; PrP.

XX

OS Homo sapiens.

XX

XX Key Location/Qualifiers

XX Region 29..69

XX /note= "Repeat region consisting of tandem repeats of

XX repeat unit: PHGGGWGQ (AAB07319)"

XX Disulfide-bond 157..192

XX Modified-site 208

XX /note= "C-terminal phospho-inositol glycolipid membrane

XX anchor (-GPI)"

XX

XX MO200029849-A1.

XX

PD 25-MAY-2000.

XX

XX 27-OCT-1999; 99WO-FI000896.

XX

XX 17-NOV-1998; 98FI-00002480.

XX

XX (WALL-) WALLAC OY.

XX (BSR-) BBSRC OFFICE.

XX

XX Hope J, Barnard GJR, Birkett CR;

XX

XX WPI; 2000-399778/34.

XX

XX New immunoassay for prion protein, used for determination of

XX transmissible spongiform encephalopathies in mammals, comprises specific

XX capture antibody.

XX

PS Disclosure; Page 43-44; 50pp; English.

XX

XX The present sequence is the human prion protein (PrP) sequence.

XX Conversion of the normal cellular form of PrP into an aggregated,

XX insoluble isoform is implicated in the pathogenesis of Transmissible

XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)

XX and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

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this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a prion epitope is captured by an antibody, which is then detected. The presence of prion indicates resistant core epitopes (AAB07320-807325) are derived from the protease resistant state of prp that is occluded when the prp is in an aggregated state

Sequence 208 AA: 100.0%; Score 193; DB 3; Length 208; Query Match Similarity 100.0%; Pred. No. 1.5e-18; Mismatches 0; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0; Indels 0; Gaps 0; Matches 36; Conservative

1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 186

RESULT 14
ABG31902 standard; protein: 208 AA.

ABG31902: (first entry)
05-NOV-2002

Human prion protein related protein #2.
Prion; human; follicular dendritic cells; FDC; infection; disease.

blood preparation; food; cosmetic; CUD; Creutzfeldt-Jacob disease.
Homo sapiens.

MO200261418-A1.
08-AUG-2002.

31-JAN-2002; 2002MO-JP000803.
31-JAN-2001; 2001JP-00024279.

(TOHO) UNIV TOHOKU.
Kitamoto T, Miyoshi K, Mori S;

Kitamoto T, Miyoshi K, Mori S;
WPI: 2002-619277/66.

Screening (non-)human prion disease infection factor based on abnormal prion protein sedimentation in non-human follicular dendritic cells as indication, applicable in safety test on e.g. drugs and cosmetics.

Disclosure: Page 49-50; 69pp; Japanese.

This invention relates to a novel method for screening human or non-human prion disease infection factor in a sample by using abnormal prion protein sedimentation in non-human follicular dendritic cells (FDC) as indication. The method of the invention is useful for screening (non-) human prion disease infection factor, which is applicable in safety tests on drugs like blood preparations, foods and cosmetics, and for developing drugs for e.g. CUD, as well as for early diagnosis of Creutzfeldt-Jacob disease (CJD). The method of the invention is simple and quick. The present sequence represents a human prion related protein of the invention

Sequence 208 AA: 100.0%; Score 193; DB 5; Length 208; Query Match Similarity 100.0%; Pred. No. 1.5e-18; Mismatches 0; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0; Indels 0; Gaps 0; Matches 36; Conservative

1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 186

Search completed: December 3, 2004, 00:55:41
Job time: 60.6066 secs

RESULT 15
ABG31904 standard; protein: 208 AA.

ABG31904: (first entry)
05-NOV-2002

Chimera-type prion protein #2.
Prion; human; follicular dendritic cells; FDC; infection; blood preparation; food; cosmetic; CUD; Creutzfeldt-Jacob disease.

Synthetic.
MO200261418-A1.

08-AUG-2002.
31-JAN-2002; 2002MO-JP000803.

31-JAN-2001; 2001JP-00024279.
(TOHO) UNIV TOHOKU.

Kitamoto T, Miyoshi K, Mori S;
WPI: 2002-619277/66.

Screening (non-)human prion disease infection factor based on abnormal prion protein sedimentation in non-human follicular dendritic cells as indication, applicable in safety test on e.g. drugs and cosmetics.

Claim 9; Page 55-57; 69pp; Japanese.

This invention relates to a novel method for screening human or non-human prion disease infection factor in a sample by using abnormal prion protein sedimentation in non-human follicular dendritic cells (FDC) as indication. The method of the invention is useful for screening (non-) human prion disease infection factor, which is applicable in safety tests on drugs like blood preparations, foods and cosmetics, and for developing drugs for e.g. CUD, as well as for early diagnosis of Creutzfeldt-Jacob disease (CJD). The method of the invention is simple and quick. The present sequence represents a chimera type prion related protein of the invention

Sequence 208 AA: 100.0%; Score 193; DB 5; Length 208; Query Match Similarity 100.0%; Pred. No. 1.5e-18; Mismatches 0; Indels 0; Gaps 0; Best Local Similarity 100.0%; Mismatches 0; Indels 0; Gaps 0; Matches 36; Conservative

1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 36
151 NNFVHDCVNITIKQHTVTTTGGNFETDVKMMR 186

Search completed: December 3, 2004, 00:55:41
Job time: 60.6066 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : PIR 79: *
1: pir1: *
2: pir2: *
3: pir3: *
4: pir4: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	226	2 A53892	prion-related prot
2	193	100.0	232	2 S71041	major prion protei
3	193	100.0	241	2 S71048	major prion protei
4	193	100.0	241	2 S71056	major prion protei
5	193	100.0	245	2 S53627	major prion protei
6	193	100.0	245	2 S71045	major prion protei
7	193	100.0	252	2 S53634	major prion protei
8	193	100.0	252	2 S53631	major prion protei
9	193	100.0	253	1 UYHU	major prion protei
10	193	100.0	253	2 S53624	major prion protei
11	193	100.0	253	2 S53623	major prion protei
12	193	100.0	253	2 S53620	major prion protei
13	193	100.0	253	2 S53625	major prion protei
14	193	100.0	253	2 I84423	major prion protei
15	193	100.0	253	2 S71055	major prion protei
16	193	100.0	253	2 S53617	major prion protei
17	193	100.0	253	2 S53635	prion protein - si
18	193	100.0	253	2 S53614	major prion protei
19	193	100.0	253	2 I37032	major prion protei
20	193	100.0	253	2 I61847	major prion protei
21	193	100.0	253	2 S53616	major prion protei
22	193	100.0	253	2 S53618	major prion protei
23	193	100.0	253	2 S53619	major prion protei
24	193	100.0	254	2 B34759	prion protein - Ch
25	193	100.0	254	2 A23544	major prion protei
26	193	100.0	252	2 A23544	major prion protei
27	192	99.5	252	2 I61848	major prion protei
28	192	99.5	260	2 S53629	major prion protei
29	191	99.0	264	2 S53137	prion protein - gr

30	189	97.9	239	2 S53633	major prion protei
31	188	97.4	254	1 UYHYH	major prion PrP-Sc
32	188	97.4	256	2 UY0268	major prion protei
33	188	97.4	257	2 A23545	major prion PrP27
34	188	97.4	264	2 A54330	major prion protei
35	187	96.9	256	2 S37149	prion protein - go
36	187	96.9	256	2 A54281	major prion protei
37	185	95.9	257	2 J01900	major prion protei
38	182	94.3	252	2 JC6175	prion protein - ra
39	58	30.1	139	2 H90004	hypothetical prote
40	54	28.0	423	2 E97165	flagellar hook pro
41	54	28.0	511	2 C69199	phenylalanine-tRNA
42	53	27.5	267	1 UYCH	major prion protei
43	53	27.5	273	2 A37372	prion protein homo
44	53	27.5	273	2 A46280	prion protein - ch
45	53	27.5	346	2 B71496	tryptophan-tRNA 11

ALIGNMENTS

```
RESULT 1
A53892
prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
R:Liao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; PMID:88037055; PMID:2889848
A:Accession: A53892
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <LIA>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C:Superfamily: major prion protein

Query Match      100.0%; Score 193; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 4e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy      1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db      145 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 180

RESULT 2
S71041
major prion protein - black-handed spider monkey (fragment)
C:Species: Atles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
A:Accession: S71041; S53630
R:Scharzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71041
A:Molecule type: DNA
A:Residues: 1-232 <SCH>
A:Cross-references: UNIPROT:P40246; EMBL:U06309; NID:G474376; PIDN:AAC50097.1; PID:G4743
U. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; PMID:95139066; PMID:7837269
A:Accession: S53630
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-194, 'R', 196-221 <SCH>
A:Cross-references: EMBL:U06309
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match      100.0%; Score 193; DB 2; Length 232;
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Best Local Similarity 100.0%; Pred. No. 4,1e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 157 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 192

RESULT 3

major prion protein - Callicebus moloch (fragment)

C/Species: Callicebus moloch

C/Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71048; S53632

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71048

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AACS0100.1; PID:g4755

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53632

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCM>

A/Cross-references: EMBL:U08312

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 166 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201

RESULT 4

major prion protein - mandrill (fragment)

C/Species: Papio sphinx, Mandrillus sphinx (mandrill)

C/Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71056; S53621

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71056

A/Molecule type: DNA

A/Residues: 1-241 <SCH>

A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AACS0091.1; PID:g4743

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53621

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-203, 'R', 205-240 <SCM>

A/Cross-references: EMBL:U08303

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 166 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201

Db 166 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201

RESULT 5

S53627

major prion protein - green monkey

C/Species: Cercopithecus aethiops (green monkey, grivet)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53627; S71043

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53627

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08291

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71043

A/Molecule type: DNA

A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCM>

A/Cross-references: EMBL:U08291; NID:g474340; PIDN:AACS0080.1; PID:g474341

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 165 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 200

RESULT 6

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71045; S53628

R/Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71045

A/Molecule type: DNA

A/Residues: 1-245 <SCH>

A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AACS0081.1; PID:g47434

R/Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCM>

A/Cross-references: EMBL:U08292

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 4,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db 165 NNFFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 200

RESULT 7

S53634

```

major prion protein - common marmoset
C:Species: Callithrix jacchus (common marmoset)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53634; S71047
R:Schatz1, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53634; MUID:95139066; PMID:7837269
A:Accession: S53634
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-252 <SCH>
A:Cross-references: UNIPROT:P40247; EMBL:U08304
R:Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71047
A:Accession: S71047
A:Molecule type: DNA
A:Residues: 1-209, 'E', 211-252 <SCW>
A:Cross-references: EMBL:U08304; NID:g474366; PIDN:AAC50092.1; PID:g474367
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 252;
Best Local Similarity 100.0%; Pred. No. 4.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 NNFVHDCVNITIKOHTVTTTGGENFETDVKMMER 36
Db 172 NNFVHDCVNITIKOHTVTTTGGENFETDVKMMER 207

RESULT 9
UHHU
major prion protein precursor - human
N:Alternate names: 11k amyloid protein; 27-30k sialoglycoprotein; PrP 27-30; PrP 33-35C;
C:Species: Homo sapiens (man)
C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004
C:Accession: A24173; A40312; A05011; S14078; I54322; I68537; I58135; I58184; I79633; I797

```

R:Kretzschmar H.A.; Stowring, L.E.; Westaway, D.; Stubblbine, W.H.; Prusiner, S.B.; De
DNA 5, 315-324, 1986
A>Title: Molecular cloning of a human prion protein CDNA.
A:Reference number: A24173; MUID:86300093; PMID:3755672
A:Accession: A24173
A:Molecule type: mRNA
A:Residues: 1-253 <RES>
A:Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
R:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A>Title: Genomic structure of the human prion protein gene.
A:Reference number: AA0372; MUID:91328137; PMID:1678248
A:Accession: AA0372
A>Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-80,89-253 <PUC>
A:Cross-references: GB:X83416; NID:g747846; PIDN:CAAS6442.1; PID:g747847
A>Note: The deletion may be a polymorphism; the alternative deletion of 82-89 could not b
R:Liso, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smucker, E.A.
Science 233, 364-367, 1986
A:Reference number: A05017; MUID:86261778; PMID:3014653
A:Accession: A05017
A:Molecule type: mRNA
A:Residues: 8-117,119-253 <LIA>
A:Cross-references: GB:D00015; NID:g220015; PIDN:AAAO011.1; PID:g220016; GB:M13667; NID
R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow
EMBO J. 10, 513-519, 1991
A>Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred) is
A:Reference number: S14078; MUID:91160504; PMID:1672107
A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72,'X','74-76,'XX','79,'XXX',83-86;111-128,'V',130-150 <TAG>
R.Diedrich, J.F.; Knopman, D.S.; Liet, J.F.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322; MUID:93250789; PMID:1363802
A:Accession: I54322
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 9-83,92-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: I68597
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>
A:Cross-references: GB:M81930; NID:g190519; PIDN:AAB59443.1; PID:g190520
R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Shermata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: I58135; MUID:92140671; PMID:1736177
A:Accession: I58135
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 51-91,'PHGGSGQOPHHGGMGPPIHGGWGPPIHGGWGQPPHGGMGPPIHGG' <RE2>
A:Cross-references: GB:S80539; NID:g244698; PIDN:AAB21334.1; PID:g244699
R:Goldfarb, L.G.; Brown, P.; McCombie, W.R.; Goldberg, D.; Swergold, G.D.; Mills, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, a
A:Reference number: I59184; MUID:92073400; PMID:1683708
A:Accession: I59184
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 60-67 <COL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID
C:Genetic:
A:Gene: GDB:PRNP; CJD; PRTP
A:Cross-references: GDB:I20720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
C:Superfamily: major prion protein
C:Keyword: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy

F/1-22/Domain: signal sequence #status predicted <SIG>
 F/23-230/Product: major prion protein #status predicted <MAT>
 F/54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
 F/231-923/Domain: carboxyl-terminal propeptide #status predicted <CTP>
 F/119-214/Diffusible bonds: #status predicted
 F/161,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
 F/230/Modified site: GPI-anchor ehanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 193; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 208

RESULT 10

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53624; S71051

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53624

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08311

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71051

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCM>

A/Cross-references: EMBL:U08311; NID:9475583; PIDN:AACS0099.1; PID:9475584

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 208

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53623; S71052

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53623

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08298

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71052

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCM>

A/Cross-references: EMBL:U08298; NID:9474354; PIDN:AACS0087.1; PID:9474355

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 208

RESULT 12

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)

C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C/Accession: S53620; S71058

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53620

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08294

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71058

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCM>

A/Cross-references: EMBL:U08294; NID:9474346; PIDN:AACS0083.1; PID:9474347

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 36
 DB 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMR 208

major prion protein - Japanese macaque

C/Species: Macaca fuscata (Japanese macaque)

C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S53625; S71053

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53625

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08301

submitted to the EMBL Data Library, April 1994

A/Reference number: S71041

A/Accession: S71053

A/Molecule type: DNA

A/Residues: 1-210, 'E', 212-253 <SCM>

A/Cross-references: EMBL:U08301; NID:9474360; PIDN:AACS0090.1; PID:9474361

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||||
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 14

184423

major prion protein precursor - rhesus macaque

C/Species: Macaca mulatta (rhesus macaque)

C/Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004

C/Accession: 184423; S53622; S71054

R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D

Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

A/Title: Infectious amyloid precursor gene sequences in primates used for experimental

A/Reference number: 136907; MUID:95083661; PMID:7991600

A/Accession: 184423

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-253 <RES>

A/Cross-references: UNIPROT:P40254; EMBL:U15163; NID:9595850; PIDN:AAA68635.1; PID:95958

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53622

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 1-210, 'R', 212-253 <SCH>

A/Cross-references: EMBL:U08307

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Accession: S71054

A/Reference number: S71041

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||||
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

RESULT 15

S71055

major prion protein - pig-tailed macaque

C/Species: Macaca nemestrina (pig-tailed macaque)

C/Date: 14-Feb-1997 #sequence revision 14-Feb-1997 #text_change 09-Jul-2004

C/Accession: S71055; S53626

R/Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A/Accession: S71041

A/Molecule type: DNA

A/Residues: 1-253 <SCH>

A/Cross-references: UNIPROT:P40254; EMBL:U08306; NID:9474370; PIDN:AAC50094.1; PID:94743

R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A/Title: Prion protein gene variation among primates.

A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53626

A/Status: nucleic acid sequence not shown

A/Molecule type: DNA

A/Residues: 8-210, 'R', 212-247 <SCH>

A/Cross-references: EMBL:U08306

C/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 193; DB 2; Length 253;
 Best Local Similarity 100.0%; Pred. No. 4.5e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 |||||
 Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 208

Search completed: December 3, 2004, 00:38:41

Job time : 10.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 58.1902 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214

Sequence score: 193
1 NNFVHDCVNITTKQHTTTTGTGKENTETDVKMER 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues

Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : UniProt_02:*
1: UniProt_sprot:*
2: UniProt_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	193	100.0	232	1	P40246 ateles geof
2	193	100.0	238	1	P40246 cercoceb
3	193	100.0	238	1	P40246 cercoceb
4	193	100.0	238	2	O86XR1
5	193	100.0	240	2	O86XR1
6	193	100.0	241	1	P40248 calliceb
7	193	100.0	241	1	P40255 mandrill
8	193	100.0	245	1	P40250 cercoptic
9	193	100.0	246	1	P40250 cercoptic
10	193	100.0	246	1	P40250 cercoptic
11	193	100.0	246	1	P40250 cercoptic
12	193	100.0	246	1	P40250 cercoptic
13	193	100.0	246	1	P40250 cercoptic
14	193	100.0	248	2	AA083636
15	193	100.0	252	1	P40249 cellobus
16	193	100.0	252	1	P40249 cellobus
17	193	100.0	253	1	P40251 gorilla
18	193	100.0	253	1	P40251 gorilla
19	193	100.0	253	1	P40251 gorilla
20	193	100.0	253	1	P40251 gorilla
21	193	100.0	253	1	P40251 gorilla
22	193	100.0	253	1	P40251 gorilla
23	193	100.0	253	1	P40251 gorilla
24	193	100.0	253	1	P40251 gorilla
25	193	100.0	253	1	P40251 gorilla
26	193	100.0	253	2	O6FGR8
27	193	100.0	253	2	O6FGR8
28	193	100.0	253	2	O6FGR8
29	193	100.0	253	2	O6FGR8
30	193	100.0	253	2	O6FGR8
31	193	100.0	254	1	P40251 gorilla

32	193	100.0	254	1	P40246 ateles geof
33	193	100.0	254	1	P40246 cercoceb
34	193	100.0	254	1	P40246 cercoceb
35	193	100.0	254	1	P40246 cercoceb
36	193	100.0	254	1	P40246 cercoceb
37	193	100.0	254	2	O86XR1
38	193	100.0	254	2	O86XR1
39	193	100.0	254	2	O86XR1
40	193	100.0	254	2	O86XR1
41	193	100.0	254	2	O86XR1
42	193	100.0	254	2	O86XR1
43	193	100.0	254	2	O86XR1
44	193	100.0	254	2	O86XR1
45	193	100.0	254	2	O86XR1

ALIGNMENTS

RESULT 1
ID P40246; STANDARD; PRT; 232 AA.
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-UTL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Ateles geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of PrP is not known. PrP is encoded in the host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: PrP has a tendency to aggregate yielding polymers called "fibrils".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: PrP is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL Outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).
CC EMBL: U08309; AAC50097.1; -
CC PIR: S71041; S71041.
CC HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00029; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15 By similarity.
FT CHAIN 16 214 Major prion protein.
FT PROPEP 215 >232 Removed in mature form (By similarity).
FT LIPID 214 214 GPI-anchor amidated serine (By

```

FT DISULFID 163 198 similarity.
FT CARBOHYD 165 165 By similarity.
FT CARBOHYD 181 181 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 84 N-linked (GlcNAc...) (potential).
FT 4 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 51 0.
FT REPEAT 52 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT NON_TER 232 232 4.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 193; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 5.2e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 36
Db 157 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 192

RESULT 2
PRIO_CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50623.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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FT NON_TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 215
FT PROPEP 216 238
FT LIPID 215 215
FT DISULFID 164 199
FT CARBOHYD 166 166 By similarity.
FT CARBOHYD 182 182 N-linked (GlcNAc...) (potential).
FT DOMAIN 44 76 4.
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3E331B CRC64;

Query Match 100.0%; Score 193; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 5.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 36
Db 158 NNFVHDCVNITIKOHTVTTTGTGKGFETDVKMER 193

RESULT 3
PRIO_THREE STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PrP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_TaxID=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC or send an email to license@isb-sib.ch).
CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PR00341; Prion.
CC PROSITE; PS00291; PRION_1; 1.

```

DR PROSITE: PS00706; PRION_2; 1.
 KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 FT SIGNAL.
 FT NON_TER 1 1
 FT SIGNAL <1 15 By similarity.
 FT CHAIN 16 215 Major prion protein.
 FT PROPP 216 >238 Removed in mature form (By similarity).
 FT DISULFID 164 199 By similarity.
 FT LIPID 215 215 GPI-anchor amidated serine (By similarity).
 FT CARBOHYD 166 166 N-linked (GLCNAC...) (Potential).
 FT CARBOHYD 182 182 N-linked (GLCNAC...) (Potential).
 FT DOMAIN 44 83 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
 FT REPEAT 44 52 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26104 MW; 5F59BF602243EDB CRC64;
 Query Match 100.0%; Score 193; DB 1; Length 238;
 Best Local Similarity 100.0%; Pred. No. 5.3e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
 DB 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 193

RESULT 4
 Q86XR1 PRELIMINARY; PRT; 238 AA.
 ID Q86XR1
 AC Q86XR1
 DT 01-JUN-2003 (TREMBLrel. 24, Created)
 DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
 DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PRNP;
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OC NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AY219882; AAC83635.1; -
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion octapep; 5.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 238 238
 SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAE CRC64;
 Query Match 100.0%; Score 193; DB 2; Length 238;
 Best Local Similarity 100.0%; Pred. No. 5.3e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
 DB 158 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 193

RESULT 5
 Q8VHV4 PRELIMINARY; PRT; 240 AA.
 ID Q8VHV4
 AC Q8VHV4;

DT 01-MAR-2002 (TREMBLrel. 20, Created)
 DT 01-MAR-2002 (TREMBLrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=Prp;
 OS Microtus agrestis (Short-tailed field vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Microtus.
 OC NCBI_TaxID=29092;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AF367625; AAL57232.1; -
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF03991; Prion octapep; 1.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 FT NON_TER 1 1
 FT NON_TER 240 240
 SQ SEQUENCE 240 AA; 26308 MW; BCAEDD3F5F76693 CRC64;
 Query Match 100.0%; Score 193; DB 2; Length 240;
 Best Local Similarity 100.0%; Pred. No. 5.4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 36
 DB 165 NNFVHDCVNITIKQHTVTTTGGNFETDVKMER 200

RESULT 6
 PRIO_CALMO STANDARD; PRT; 241 AA.
 ID PRIO_CALMO
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN Name=PRNP;
 OS Callitriche moloch (Dusky titi).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitricinae;
 OC Callitriche.
 OC NCBI_TaxID=9523;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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DR EMBL, U08312; AAC50100.1; -.
 DR PIR, S71048; S71048.
 DR HSP, P23907; I604.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
 KW Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 >241
 FT DISULFID 172 207
 FT LIPID 223 223
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5,4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 36
 DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 201

RESULT 7
 PRIO_MANSP STANDARD; PRT; 241 AA.
 ID PRIO_MANSP
 AC P40255;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C) (Fragment).
 GN Name=PRNP;
 OS Mandrill; sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Mandrillus.
 NCBI_Taxid=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE).

CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
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DR EMBL, U08303; AAC50091.1; -.
 DR PIR, S71056; S71056.
 DR HSP, P23907; I604.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 KW NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 >241
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match 100.0%; Score 193; DB 1; Length 241;
 Best Local Similarity 100.0%; Pred. No. 5,4e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 36
 DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVKKMER 201

RESULT 8
 PRIO_CERAB STANDARD; PRT; 245 AA.
 ID PRIO_CERAB
 AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 05-JUL-2004 (Rel. 44, Last annotation update)
 DE Major prion protein precursor (Prp) (PrP27-30) (PrP33-35C).
 GN Name=PRNP;
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OS Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_Taxid=9534, 36224;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen P.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

```

CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL: U08291; AAC50080.1; -.
DR      EMBL: U08292; AAC50081.1; -.
DR      PIR: S53627; S53627.
DR      PIR: S71045; S71045.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00377; Prion; 1.
DR      Pfam: PF03991; Prion; octapep; 5.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
DR      GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KM      SIGNAL      1      22
FT      CHAIN      23      222
FT      PROPEP      223      245
FT      LIPID      222      222
FT      DISULFID      171      206
FT      CARBOHYD      173      173
FT      CARBOHYD      189      189
FT      DOMAIN      51      83
FT      REPEAT      51      59
FT      REPEAT      60      67
FT      REPEAT      68      75
FT      REPEAT      76      83
SQ      SEQUENCE      245 AA; 26885 MW; D582B58E2726C99A CRC64;

Query Match      100.0%; Score 193; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db      165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 200

RESULT 9
PRIO_CERMO      STANDARD; -      PRT; 246 AA.
AC      P61761; Q95172; Q95173;
DT      01-NOV-1997 (Rel. 35, Created)
DT      01-NOV-1997 (Rel. 35, Last sequence update)
DT      05-JUL-2004 (Rel. 44, Last annotation update)
DE      Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN      Name=PRNP;
OS      Cercopithecus mona (Mona monkey).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC      Cercopithecinae; Cercopithecus.
OX      NCBI_TaxID=36226;
RN      [1]
RP      SEQUENCE FROM N.A.
RA      "Evidence for an increased substitution rate of the hominoid prion
RT      protein gene during the period of brain expansion.";
```

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DDBJ databases.
CC      -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC      "rode".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL: U75386; AAB50625.1; -.
DR      HSSP: P23907; 1G04.
DR      InterPro: IPR000817; Prion.
DR      Pfam: PF00377; Prion; 1.
DR      Pfam: PF03991; Prion; octapep; 6.
DR      PRINTS: PR00341; PRION.
DR      PROSITE: PS00291; PRION_1; 1.
DR      PROSITE: PS00706; PRION_2; 1.
DR      GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KM      SIGNAL      1      1
FT      CHAIN      <1      15
FT      PROPEP      16      223
FT      LIPID      224      246
FT      DISULFID      172      207
FT      CARBOHYD      174      174
FT      CARBOHYD      190      190
FT      DOMAIN      44      84
FT      REPEAT      44      52
FT      REPEAT      53      60
FT      REPEAT      61      68
FT      REPEAT      69      76
FT      REPEAT      77      84
SQ      SEQUENCE      246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;

Query Match      100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 36
Db      166 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMMR 201

RESULT 10
PRIO_CERNE      STANDARD;      PRT; 246 AA.
AC      P61762; Q95172; Q95173;
DT      01-NOV-1997 (Rel. 35, Created)
DT      01-NOV-1997 (Rel. 35, Last sequence update)
DT      05-JUL-2004 (Rel. 44, Last annotation update)
DE      Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN      Name=PRNP;
OS      Cercopithecus neglectus (De Brazza's monkey).
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC      Cercopithecinae; Cercopithecus.
OX      NCBI_TaxID=36227;
RN      [1]
RP      SEQUENCE FROM N.A.
```

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RA van der Kuy1 A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion."
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: U75387; AAB50626.1; -.
DR HSPSP: P23907; I004.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00391; Prion octapep; 6.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 36
Db 166 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 201

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OK NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuy1 A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion."
CC Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL: U75385; AAB50628.1; -.
DR HSPSP: P23907; I004.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00391; Prion octapep; 6.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR GlycoProtein: GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT NON_TER 1 1
FT SIGNAL <1 15
FT CHAIN 16 223
FT PROPEP 224 246
FT LIPID 223 223
FT DISULFID 172 207
FT CARBOHYD 174 174
FT CARBOHYD 190 190
FT DOMAIN 44 84
FT REPEAT 44 52
FT REPEAT 53 60
FT REPEAT 61 68
FT REPEAT 69 76
FT REPEAT 77 84
FT SEQUENCE 246 AA; 26914 MW; F58679CBBEC5AD7 CRC64;

Query Match 100.0%; Score 193; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 5.5e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 36
Db 166 NNFFVHDCVNIITIKOHTVTTTIGENFTETDVMMER 201

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RESULT 12
PRIO_EBRYPA
AC 095174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
CC Cercopithecinae; Cercopithecus.

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DT	02-MAR-2004	(TREMBLrel. 27, Last annotation update)
CC	Enkaryota; Metazoa; Chordata; Craniota; Vertebrata; Euteleostomi;	
CC	Mammalia; Eutheria; Primates; Catarrhini; Cercopitheidae;	
CC	Cercopitheinae; Erythrocebus.	
OX	NCBI_taxid=9538;	
RN	[1]	
RP	SEQUENCE FROM N.A.	
RA	van der Kuyl A.C., Dekker J.T., Goudamit J.;	
RT	"Evidence for an increased substitution rate of the hominoid prion	
RT	protein gene during the period of brain expansion.";	
RT	Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.	
CC	-1- FUNCTION: The function of PrP is not known. PrP is encoded in the	
CC	host genome and is expressed both in normal and infected cells.	
CC	-1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called	
CC	"fibrils".	
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.	
CC	-1- DISEASE: PrP is found in high quantity in the brain of humans and	
CC	animals infected with the degenerative neurological diseases kuru,	
CC	Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome	
CC	(GSS), scrapie, bovine spongiform encephalopathy (BSE),	
CC	transmissible mink encephalopathy (TME), etc.	
CC	-1- SIMILARITY: Belongs to the prion family.	
CC	-----	
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration	
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CC	use by non-profit institutions as long as its content is in no way	
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CC	or send an email to license@isb-ibb.ch).	
CC	-----	
DR	EMBL; U75388; AAB50627.1; -.	
DR	HSSP; E23907; IG04.	
DR	InterPro; IPR000817; Prion.	
DR	Pfam; PF00377; Prion; 1.	
DR	Pfam; PF03991; Prion octapep; 6.	
DR	PRINTS; PR00341; PRION.	
DR	PROSITE; PS00291; PRION_1; 1.	
DR	PROSITE; PS00706; PRION_2; 1.	
KW	Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.	
FT	NON TER 1 1	
FT	SIGNAL <1 15 By similarity.	
FT	CHAIN 16 223 Major prion protein.	
FT	PROPEP 224 246 Removed in mature form (By similarity).	
FT	LIPID 223 223 GPI-anchor amidated serine (By similarity).	
FT	DISULFID 172 207 By similarity.	
FT	CARBOHYD 174 174 N-linked (GlcNAc...) (potential).	
FT	CARBOHYD 190 190 N-linked (GlcNAc...) (potential).	
FT	DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-G-W-G-Q.	
FT	REPEAT 44 52 1. 1.	
FT	REPEAT 53 60 2. 2.	
FT	REPEAT 61 68 3. 3.	
FT	REPEAT 69 76 4. 4.	
FT	REPEAT 77 84 5. 5.	
SQ	SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;	
Query Match	100.0%; Score 193; DB 1; Length 246;	
Best Local Similarity	100.0%; Pred. No. 5,5e-18;	
Matches 36; Conservative	0; Mismatches 0; Indels 0; Gaps 0	
QY	1 NNFFVDCVNITIKQHTVTTTNGENFTETDVQMER 36	
DB	166 NNFFVDCVNITIKQHTVTTTNGENFTETDVQMER 201	
RESULT 13		
AAO83636		
ID	AAO83636 PRELIMINARY; PRT; 246 AA.	
AC	AAO83636;	
DT	02-MAR-2004 (TREMBLrel. 27, Created)	
DT	02-MAR-2004 (TREMBLrel. 27, Last sequence update)	
DT	02-MAR-2004 (TREMBLrel. 27, Last annotation update)	

DE	Prior protein (Fragment).
GN	PRNP.
OS	Homo sapiens (Human)
OC	Eukaryota; Metazoa; Chordata; Cranialta; Vertebrata; Euteleostomi;
CC	Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
OX	NCBI_TaxID=9606;
RN	[1]
RP	SEQUENCE FROM N.A.
RA	Jong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RT	"Polymorphisms of the prion protein gene in Korea."
RL	Submitted (JUN-2003) to the EMBL/GenBank/DDBJ databases.
DR	EMBL; AY219883; AAC83636.1; -.
KM	Prion.
FT	NON TER
FT	NON TER
SO	SEQUENCE
QY	Query Match
Db	Best Local Similarity
	Matches
	Score 193; DB 2; Length 246;
	100.0%; Pred. No. 5.5e-18;
	Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	1 NNPFVHDCVNITIKOHTVTTTTGGENFETDVKMMER 36
	166 NNPFVHDCVNITIKOHTVTTTTGGENFETDVKMMER 201
RESULT 14	
ID	Q8VHV5
AC	PRELIMINARY; PRT; 248 AA.
Q8VHV5	
DT	01-MAR-2002 (TREMBLrel. 20, Created)
DT	01-MAR-2002 (TREMBLrel. 20, Last sequence update)
DT	01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE	Prion protein (Fragment).
GN	Name=PrP;
OS	Clethrionomys glareolus (Bank vole).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
CC	Mammalia; Eutheria; Rodentia; Sciurgnathi; Muridae; Arvicolinae;
CC	Clethrionomys.
OX	NCBI_TaxID=51090;
RN	[1]
RP	SEQUENCE FROM N.A.
RA	Dell'Onno G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA	Di Gardo G., Kreisgesmar H.A., Wolfer D.P., Lipp H.P.;
RL	Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases.
CC	- SIMILARITY: Belongs to the prion family.
CC	EMBL; AF367624; AAL57231.1; -.
DR	InterPro; IPR000817; Prion.
DR	Pfam; PF00377; Prion; 1.
DR	Pfam; PF03991; Prion_octapep; 6.
DR	PRINTS; PRO0341; PRION.
DR	SMART; SMO0157; PRP; 1.
DR	PROSITE; PS00291; PRION_1; 1.
DR	PROSITE; PS00706; PRION_2; 1.
KW	Prion.
FT	NON TER
FT	NON TER
SO	SEQUENCE
QY	Query Match
Db	Best Local Similarity
	Matches
	Score 193; DB 2; Length 248;
	100.0%; Pred. No. 5.5e-18;
	Conservative 0; Mismatches 0; Indels 0; Gaps 0;
	1 NNPFVHDCVNITIKOHTVTTTTGGENFETDVKMMER 36
	173 NNPFVHDCVNITIKOHTVTTTTGGENFETDVKMMER 208
RESULT 15	
ID	PRI0_CALJA
AC	STANDARD; PRT; 252 AA.
P40247	
DT	01-FEB-1995 (Rel. 31, Created)
DT	01-FEB-1995 (Rel. 31, Last sequence update)

```

DT 05-JUN-2004 (Rel. 44, last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN Name=PRNP;
OS Callitrichus jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callitrich.
OX NCBI_TaxID=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor U., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC
CC EMBL: U08304; AAC50092.1; -
CC DR PIR: S53634; S53634.
CC DR HSP: P23907; IG04.
CC DR InterPro: IPR000817; Prion.
CC DR Pfam: PF00377; Prion; 1.
CC DR Pfam: PF03991; Prion octapep; 6.
CC DR PRINTS: PRO0341; PRION.
CC DR PROSITE: PS00291; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC FT SIGNAL 1 22
CC FT CHAIN 23 229
CC FT PROPEP 230 252
CC FT LIPID 229 229
CC FT DISULFID 178 213
CC FT CARBOHYD 180 180
CC FT CARBOHYD 196 196
CC FT DOMAIN 51 90
CC FT REPEAT 51 58
CC FT REPEAT 59 66
CC FT REPEAT 67 74
CC FT REPEAT 75 82
CC FT REPEAT 83 90
CC FT REPEAT 90 5.
CC SQ SEQUENCE 252 AA; 27639 MM; B2800B60F05CE664 CRC64;
Query Match 100.0%; Score 193; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 5,7e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Search completed: December 3, 2004, 00:35:31
Job time : 58.1902 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_214

Perfect score: 193
Sequence: 1 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMER 36Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA.*
1: /cgn2_6/ptodata/1/1aa/5A.COMB.pep.*
2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep.*
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep.*
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep.*
5: /cgn2_6/ptodata/1/1aa/PTCUS.COMB.pep.*
6: /cgn2_6/ptodata/1/1aa/backfilest.pep.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	193	100.0	142	1 US-08-556-823-10	Sequence 10, Appl
2	193	100.0	245	4 US-09-431-887-5	Sequence 5, Appl
3	193	100.0	245	4 US-09-431-887-15	Sequence 15, Appl
4	193	100.0	252	4 US-09-431-887-13	Sequence 13, Appl
5	193	100.0	252	4 US-09-431-887-17	Sequence 17, Appl
6	193	100.0	253	1 US-08-242-188-2	Sequence 2, Appl
7	193	100.0	253	1 US-08-509-261A-2	Sequence 2, Appl
8	193	100.0	253	1 US-08-660-626-8	Sequence 8, Appl
9	193	100.0	253	1 US-08-692-892-2	Sequence 2, Appl
10	193	100.0	253	2 US-08-713-939A-2	Sequence 2, Appl
11	193	100.0	253	2 US-08-868-162A-22	Sequence 22, Appl
12	193	100.0	253	3 US-09-031-168-8	Sequence 8, Appl
13	193	100.0	253	3 US-09-128-450-20	Sequence 20, Appl
14	193	100.0	253	3 US-09-036-579-2	Sequence 2, Appl
15	193	100.0	253	3 US-09-823-494-20	Sequence 20, Appl
16	193	100.0	253	3 US-09-550-374-2	Sequence 2, Appl
17	193	100.0	253	4 US-09-431-887-1	Sequence 1, Appl
18	193	100.0	253	4 US-09-431-887-2	Sequence 2, Appl
19	193	100.0	253	4 US-09-431-887-3	Sequence 3, Appl
20	193	100.0	253	4 US-09-431-887-4	Sequence 4, Appl
21	193	100.0	253	4 US-09-431-887-7	Sequence 7, Appl
22	193	100.0	253	4 US-09-431-887-8	Sequence 8, Appl
23	193	100.0	253	4 US-09-431-887-9	Sequence 9, Appl
24	193	100.0	253	4 US-09-431-887-10	Sequence 10, Appl
25	193	100.0	253	4 US-09-431-887-11	Sequence 11, Appl
26	193	100.0	253	4 US-09-431-887-12	Sequence 12, Appl
27	193	100.0	253	4 US-09-431-887-14	Sequence 14, Appl

28	193	100.0	253	4 US-09-431-887-16	Sequence 16, Appl
29	193	100.0	253	4 US-09-431-887-18	Sequence 18, Appl
30	193	100.0	253	4 US-09-431-887-19	Sequence 19, Appl
31	193	100.0	253	4 US-09-943-906-2	Sequence 2, Appl
32	193	100.0	253	4 US-09-669-516C-8	Sequence 8, Appl
33	193	100.0	253	4 US-09-919-172-57	Sequence 57, Appl
34	193	100.0	253	4 US-09-976-594-72	Sequence 72, Appl
35	193	100.0	253	4 US-09-904-987-3	Sequence 3, Appl
36	193	100.0	254	1 US-08-242-188-1	Sequence 1, Appl
37	193	100.0	254	1 US-08-509-261A-1	Sequence 1, Appl
38	193	100.0	254	1 US-08-660-626-7	Sequence 7, Appl
39	193	100.0	254	1 US-08-692-892-1	Sequence 1, Appl
40	193	100.0	254	2 US-08-713-939A-1	Sequence 1, Appl
41	193	100.0	254	2 US-08-868-162A-21	Sequence 21, Appl
42	193	100.0	254	3 US-09-031-168-7	Sequence 7, Appl
43	193	100.0	254	3 US-09-128-450-19	Sequence 19, Appl
44	193	100.0	254	3 US-09-128-450-28	Sequence 28, Appl
45	193	100.0	254	3 US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
TITLE OF INVENTION: Formation and use of prion protein
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556, 823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 100.0%; Score 193; DB 1; Length 142;
Best Local Similarity 100.0%; Pred. No. 7, 4e-20;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMER 36
DB 84 NNFVHDCVNITIKQHTVTTTKGENFTETDVKKMER 119

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RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431.887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

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Query Match      100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 36
DB      165 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 200

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RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431.887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRT
; ORGANISM: Cercopithecus diana
US-09-431-887-15

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Query Match      100.0%; Score 193; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 1.4e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 36
DB      165 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 200

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RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431.887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

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; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Callithrix sp.
US-09-431-887-13

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Query Match      100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 36
DB      172 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 207

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```

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431.887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRT
; ORGANISM: Cebus sp.
US-09-431-887-17

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Query Match      100.0%; Score 193; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 36
DB      172 NNFVHDCVNITIKOHTVTTTGGNFTEFDVKMMER 207

```

```

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bosicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

```

FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULE TYPE: linear
TOPOLOGY: linear
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP

US-08-242-188-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 173 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMER 208

RESULT 7
US-08-509-261A-2
Sequence 2, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 173 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMER 208

RESULT 8
US-08-660-626-8
Sequence 8, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP

US-08-660-626-8

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 173 NNPFVDCVNITIKQHTVTTTGGNFETDVKKMER 208

RESULT 9
US-08-692-892-2
Sequence 2, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTION PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSES: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 193; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 1,5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 208

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSES: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1,5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 36
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKKMER 208

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSES: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULAR TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 193; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTETDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTETDVKMMR 208

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIOTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031.168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULAR TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTETDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTETDVKMMR 208

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Suseette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTKGNTETDVKMMR 36
DB 173 NNFVHDCVNITIKQHTVTTTKGNTETDVKMMR 208

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Burton, Dennis R.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 36
DB 173 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 208

RESULT 15
US-09-823-494-20
; Sequence 20, Application US/09823494
; Patent No. 6355610
; GENERAL INFORMATION:
; APPLICANT: Chesebro, Bruce W
; APPLICANT: Caughey, Byron W
; APPLICANT: Chabry, Joelle
; APPLICANT: Priola, Subette
; TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
; TITLE OF INVENTION: Protein
; FILE REFERENCE: 50121
; CURRENT APPLICATION NUMBER: US/09/823,494
; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 20
; LENGTH: 253
; TYPE: PRP
; ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 193; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 1.5e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 36
DB 173 NNFVHDCVNITIKQHTVTTTNGENFTETDVKKMER 208

Search completed: December 3, 2004, 00:18:58
Job time : 13.6328 secs

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 2
US-10-050-898-348

; Sequence 348, Application US/10050898
; Publication No. US20030175711A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tisbet, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Ploesek, Christine
; APPLICANT: Ortman, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Staudenfel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 348
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 3
US-10-346-190-89

; Sequence 89, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20

; PRIOR APPLICATION NUMBER: PCT/IB02/00166

; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 89
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 193; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.6e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 52 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 87

RESULT 4
US-10-050-902-324

; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tisbet, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Seibel, Peter
; APPLICANT: Ploesek, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; CURRENT FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrpC construct
US-10-050-902-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
Db 53 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 88

RESULT 5
US-10-050-898-324

; Sequence 324, Application US/10050898
; Publication No. US20030175711A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin

APPLICANT: Tisoc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrpC
US-10-050-898-324

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 88

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliodi, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrpC
US-10-346-190-93

Query Match 100.0%; Score 193; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 4.9e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 53 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 88

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Lahr, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 193; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 5.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 84 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 119

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins, Related Reagents
FILE REFERENCE: Pp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: primate
US-09-745-003-10

Query Match 100.0%; Score 193; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 6.8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 36
Db 82 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMER 117

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

/ CURRENT APPLICATION NUMBER: US/10/104.047
 / CURRENT FILING DATE: 2002-03-25
 / PRIOR APPLICATION NUMBER:
 / PRIOR FILING DATE:
 / NUMBER OF SEQ ID NOS: 4096
 / SOFTWARE: PatentIn Ver. 2.1
 / SEQ ID NO 103
 / LENGTH: 163
 / TYPE: PRT
 / ORGANISM: Homo sapiens
 US-10-047-2013

Query Match 100.0%; Score 193; DB 14; Length 163;
 Best Local Similarity 100.0%; Pred. No. 6.8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 83 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 118

RESULT 10
 / Sequence 12, Application US/09745003
 / Patent No. US20020042122A1
 / GENERAL INFORMATION:
 / APPLICANT: Bazan, Fernando J
 / TITLE OF INVENTION: Human Proteins; Related Reagents
 / FILE REFERENCE: PPT2
 / CURRENT APPLICATION NUMBER: US/09/745.003
 / CURRENT FILING DATE: 2000-12-20
 / NUMBER OF SEQ ID NOS: 13
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO 12
 / LENGTH: 164
 / TYPE: PRT
 / ORGANISM: rodent
 US-09-745-003-12

Query Match 100.0%; Score 193; DB 9; Length 164;
 Best Local Similarity 100.0%; Pred. No. 6.9e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 82 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 117

RESULT 11
 / Sequence 10, Application US/10470848
 / Publication No. US20040137421A1
 / GENERAL INFORMATION:
 / APPLICANT: President of Tohoku University
 / TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 / FILE REFERENCE: PH-1224-PCT
 / CURRENT APPLICATION NUMBER: US/10/470.848
 / CURRENT FILING DATE: 2003-07-31
 / PRIOR APPLICATION NUMBER: JP 2001-24279
 / PRIOR FILING DATE: 2001-01-31
 / NUMBER OF SEQ ID NOS: 10
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO 10
 / LENGTH: 200
 / TYPE: PRT
 / ORGANISM: Homo sapiens
 US-10-470-848-10

Query Match 100.0%; Score 193; DB 16; Length 200;
 Best Local Similarity 100.0%; Pred. No. 8.8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36

DB 143 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 178

RESULT 12
 / Sequence 3, Application US/10470848
 / Publication No. US20040137421A1
 / GENERAL INFORMATION:
 / APPLICANT: President of Tohoku University
 / TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 / FILE REFERENCE: PH-1224-PCT
 / CURRENT APPLICATION NUMBER: US/10/470.848
 / CURRENT FILING DATE: 2003-07-31
 / PRIOR APPLICATION NUMBER: JP 2001-24279
 / PRIOR FILING DATE: 2001-01-31
 / NUMBER OF SEQ ID NOS: 10
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO 3
 / LENGTH: 208
 / TYPE: PRT
 / ORGANISM: Homo sapiens
 US-10-470-848-3

Query Match 100.0%; Score 193; DB 16; Length 208;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 186

RESULT 13
 / Sequence 1, Application US/10745393
 / Publication No. US20040203131A1
 / GENERAL INFORMATION:
 / APPLICANT: Scholz, Elke
 / APPLICANT: Scholz, Christian
 / APPLICANT: Stock, Werner
 / APPLICANT: Scharschmidt, Peter
 / TITLE OF INVENTION: Complexes comprising a prion protein and pepitidyl prolyl isomerase
 / FILE REFERENCE: 12296 US3 (9793/141)
 / CURRENT APPLICATION NUMBER: US/10/745.393
 / CURRENT FILING DATE: 2003-12-23
 / PRIOR APPLICATION NUMBER: EP 0115225.3
 / PRIOR FILING DATE: 2001-06-22
 / PRIOR APPLICATION NUMBER: EP 01120939.2
 / PRIOR FILING DATE: 2001-08-31
 / PRIOR APPLICATION NUMBER: US 10/167,774
 / PRIOR FILING DATE: 2002-06-10
 / PRIOR APPLICATION NUMBER: US 10/179,905
 / PRIOR FILING DATE: 2002-06-24
 / NUMBER OF SEQ ID NOS: 3
 / SOFTWARE: PatentIn version 3.1
 / SEQ ID NO 1
 / LENGTH: 208
 / TYPE: PRT
 / ORGANISM: Homo sapiens
 US-10-745-393-1

Query Match 100.0%; Score 193; DB 17; Length 208;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 36
 DB 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMER 186

RESULT 14

US-10-470-848-6
 ; Sequence 6, Application US/10470848
 ; Publication No. US20040137421A1
 ; GENERAL INFORMATION:
 ; APPLICANT: President of Tohoku University
 ; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 ; FILE REFERENCE: PH-1224-PCT
 ; CURRENT APPLICATION NUMBER: US/10/470,848
 ; CURRENT FILING DATE: 2003-07-31
 ; PRIOR APPLICATION NUMBER: JP 2001-24279
 ; PRIOR FILING DATE: 2001-01-31
 ; NUMBER OF SEQ ID NOS: 10
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 6
 ; LENGTH: 209
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:CM-type prion protein
 US-10-470-848-6

Query Match 100.0%; Score 193; DB 16; Length 209;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 186

RESULT 15
 US-10-470-848-7
 ; Sequence 7, Application US/10470848
 ; Publication No. US20040137421A1
 ; GENERAL INFORMATION:
 ; APPLICANT: President of Tohoku University
 ; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
 ; FILE REFERENCE: PH-1224-PCT
 ; CURRENT APPLICATION NUMBER: US/10/470,848
 ; CURRENT FILING DATE: 2003-07-31
 ; PRIOR APPLICATION NUMBER: JP 2001-24279
 ; PRIOR FILING DATE: 2001-01-31
 ; NUMBER OF SEQ ID NOS: 10
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 7
 ; LENGTH: 209
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
 US-10-470-848-7

Query Match 100.0%; Score 193; DB 16; Length 209;
 Best Local Similarity 100.0%; Pred. No. 9.2e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 36
 Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMMER 186

Search completed: December 3, 2004, 01:07:48
 Job time : 43.6098 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 66.2295 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKQHTVTITTKGSENFTEIDVKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

1: A_Geneseq_23Sep04:*
2: geneeqp1980s:*
3: geneeqp1990s:*
4: geneeqp2000s:*
5: geneeqp2001s:*
6: geneeqp2002s:*
7: geneeqp2003as:*
8: geneeqp2003bs:*
8: geneeqp2004s:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	5	ABG94357 Modified
2	211	100.0	117	5	ABG80669 Human pri
3	211	100.0	117	7	ADD24196 Modified
4	211	100.0	124	5	ABG94340 Mouse mpr
5	211	100.0	124	5	ABG80652 Mouse tru
6	211	100.0	124	7	ADD24200 mPrPr-RK-
7	211	100.0	142	7	AAW17686 Prion pro
8	211	100.0	163	7	ADB63859 Human pro
9	211	100.0	200	5	ABG31907 Human pri
10	211	100.0	208	3	AAW07316 Mouse pri
11	211	100.0	208	3	AAW07318 Human pri
12	211	100.0	208	3	AAW07327 Mouse pri
13	211	100.0	208	3	AAW07329 Human pri
14	211	100.0	208	5	ABG31902 Human pri
15	211	100.0	208	5	ABG31904 Chimera-t
16	211	100.0	208	7	ADJ66133 Mouse pri
17	211	100.0	209	5	ABG31905 HCHV type
18	211	100.0	211	4	AAW30801 Amino aci
19	211	100.0	225	6	ABR42793 Rat prion
20	211	100.0	226	7	ADB85240 Rat prion
21	211	100.0	245	4	AAW72342 Monkey pr
22	211	100.0	245	4	AAW72352 Cercopit
23	211	100.0	253	2	AAW6715 Human pri
24	211	100.0	253	2	AAW69660 Human pri
25	211	100.0	253	2	AAW85901 Human pri

26	211	100.0	253	2	AAW07994 Human pri
27	211	100.0	253	3	AAW81485 Human pri
28	211	100.0	253	3	AAW06272 Human pri
29	211	100.0	253	3	AAW15035 Human pri
30	211	100.0	253	4	AAW72339 Chimpanze
31	211	100.0	253	4	AAW72347 Prion pro
32	211	100.0	253	4	AAW72353 Guereza p
33	211	100.0	253	4	AAW72345 Rhesus mo
34	211	100.0	253	4	AAW72345 Gibbon pr
35	211	100.0	253	4	AAW72350 Marmoset
36	211	100.0	253	4	AAW72351 Hamadryas
37	211	100.0	253	4	AAW72348 Prion pro
38	211	100.0	253	4	AAW72356 Slamang p
39	211	100.0	253	4	AAW72346 Prion pro
40	211	100.0	253	4	AAW72355 Prion pro
41	211	100.0	253	4	AAW72349 Prion pro
42	211	100.0	253	4	AAW72340 Orangutan
43	211	100.0	253	4	AAW72338 Human pri
44	211	100.0	253	4	AAW72354 Capuchin
45	211	100.0	253	4	AAW72341 Gorilla p

ALIGNMENTS

RESULT 1
ID ABG94357 standard; protein; 117 AA.
XX AC ABG94357;
XX DT 10-DEC-2002 (first entry)
XX DE Modified human prion protein fragment.
XX KW Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
XX KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
XX KW vaccine; infectious disease.
XX OS Homo sapiens.
XX PN MO200256905-A2.
XX PD 25-JUL-2002.
XX PF 21-JAN-2002; 2002MO-IB000166.
XX PR 19-JAN-2001; 2001US-0262379P.
XX PR 04-MAY-2001; 2001US-0288549P.
XX PR 05-OCT-2001; 2001US-0326998P.
XX PR 07-NOV-2001; 2001US-031045P.
XX PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX PI Renner WA, Bachmann W, Tisot A, Maurer P, Lechner F, Sebbel P;
XX PI Plossek C;
XX WP1; 2002-627351/67.
XX PT Molecular antigen array used in the production of vaccines for infectious
XX PT diseases.
XX PS Disclosure; Page 441; 441pp; English.
XX CC This invention relates to a novel ordered and repetitive antigen array
XX CC used in the production of vaccines for infectious diseases. The invention
XX CC also discloses a composition comprising a non-natural molecular scaffold
XX CC comprising a core particle selected from a core particle of a non-natural
XX CC origin and a core particle of natural origin and an organism comprising
XX CC at least one first attachment site, where the organism is connected to
XX CC the core particle by at least one covalent bond. Also disclosed is an
XX CC antigen or antigenic determinant with at least one second attachment
XX CC site, where the antigen or antigenic determinant is amyloid beta peptide

CC (Abetal-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Obeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cyostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention
 XX

Sequence 117 AA:

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
 DB 52 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 91

RESULT 2

ABG80669
 ID ABG80669 standard; protein; 117 AA.
 AC ABG80669;
 XX
 DT 29-NOV-2002 (first entry)
 XX

Human prion protein/cysteine-containing peptide fusion protein.
 KM Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutan;
 KM graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 KM
 XX Homo sapiens.
 OS Synthetic.
 XX
 XX MO200256907-A2.
 XX
 XX 25-JUL-2002.
 PD
 XX 21-JAN-2002; 2002WO-1B000168.
 PF
 XX 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 XX (CYTO-) CYTOS BIORECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUBO/) LUBOEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX
 XX Maurer P, Lechner F, Ortman R, Lueoend R, Staufenbiel M, Frey P;
 PI

PI Renner WA, Bachmann M, Tissot A, Seibel P, Piossek C;
 XX
 XX WPI; 2002-636514/68.
 XX
 XX Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS
 XX Disclosure; Page 418; 418pp; English.

The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (11) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (11) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 XX
 XX Sequence 117 AA;

Query Match 100.0%; Score 211; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 1.4e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
 DB 52 NNFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 91

RESULT 3

ADD24196
 ID ADD24196 standard; protein; 117 AA.
 AC ADD24196;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 XX Modified human prion protein amino acid sequence.
 DE
 XX
 XX vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion; mutant; mutein.
 XX
 XX Synthetic.
 OS prion.
 OS
 XX
 XX MO2003059386-A2.
 XX
 XX

PD 24-JUL-2003.
XX
XX 17-JAN-2003; 2003WO-EP000460.
XX
XX 18-JAN-2002; 2002US-00050902.
PR 21-JAN-2002; 2002WO-IB000166.
PR 08-JUL-2002; 2002US-0393725P.
PR 18-JUL-2002; 2002US-0396590P.
XX
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
XX WPI; 2003-598483/56.
XX
XX A vaccine composition for preventing or treating prion diseases (e.g.
PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
PT phage) and at least one prion protein or peptide bound to the virus-like
PT particle.
XX
XX Disclosure; SEQ ID NO 89; 246bp; English.
XX
XX This invention relates to a novel vaccine composition comprising a virus-
CC like or a core particle with at least one first attachment site and at
CC least one antigen or antigenic determinant that is a prion protein (PrP)
CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
CC being bound to the virus-like or core particle. The vaccine of the
CC invention may have neuroprotective or antiinflammatory activity. The
CC composition is useful as a medicament or in manufacturing a medicament
CC for the treatment or prevention of prion diseases. The prion diseases may
CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
CC Disease. The present sequence is the amino acid sequence of a modified
CC human prion protein (PrP) which may be used during the creation of the
CC vaccine composition of the invention.
XX
SQ Sequence 117 AA;
Query Match 100.0%; Score 211; DB 7; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 52 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 91
RESULT 4
ABG94340
ID ABG94340 standard; protein; 124 AA.
XX
AC ABG94340;
XX
DT 10-DEC-2002 (first entry)
XX
DE Mouse mPrPc protein.
XX
XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytosolic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.
XX
OS Mus sp.
XX
PN WO200256905-A2.
XX
PD 25-JUL-2002.
XX
XX 21-JAN-2002; 2002WO-IB000166.
XX
XX 19-JAN-2001; 2001US-0262379P.
PR 04-MAY-2001; 2001US-0288549P.
PR 05-OCT-2001; 2001US-0326988P.
PR 07-NOV-2001; 2001US-0331045P.
XX

PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Renner WA, Bachmann M, Tiesot A, Maurer P, Lechner F, Sebbel P;
PI Plosek C;
XX
XX WPI; 2002-627351/67.
DR
XX
XX Molecular antigen array used in the production of vaccines for infectious
PT diseases.
XX
XX Disclosure; Page 438; 441pp; English.
XX
XX This invention relates to a novel ordered and repetitive antigen array
CC used in the production of vaccines for infectious diseases. The invention
CC also discloses a composition comprising a non-natural molecular scaffold
CC comprising a core particle selected from a core particle of a non-natural
CC origin and a core particle of natural origin and an organiser comprising
CC at least one first attachment site, where the organiser is connected to
CC the core particle by at least one covalent bond. Also disclosed is an
CC antigen or antigenic determinant with at least one second attachment
CC site, where the antigen or antigenic determinant is amyloid beta peptide
CC (A β 1-42) or its fragment and where the second attachment site is
CC selected from an attachment site not naturally occurring with the antigen
CC or antigenic determinant and an attachment site naturally occurring with
CC the antigen or antigenic determinant, where the second attachment site is
CC capable of association through at least one non-peptide bond to the first
CC attachment site and where the antigen or antigenic determinant and the
CC scaffold interact through the association to form an ordered and
CC repetitive antigen array. The invention also comprises a coat protein
CC capable of forming a capsid which comprises mutant Qbeta coat proteins
CC having an amino acid sequence selected from five amino acid sequences
CC fully defined in the specification. The compounds of the invention may
CC have antimicrobial, antiallergic, immunomodulatory, cytosolic, used in
CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
CC immunisation and as a vaccine. The present sequence represents a protein
CC sequence used to create the compositions of the invention
XX
SQ Sequence 124 AA;
Query Match 100.0%; Score 211; DB 5; Length 124;
Best Local Similarity 100.0%; Pred. No. 1.5e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 40
DB 53 NNFVHDCVNTTIKQHTVTTTGGNFETDVKMERVVEQ 92
RESULT 5
ABG80652
ID ABG80652 standard; protein; 124 AA.
XX
AC ABG80652;
XX
DT 29-NOV-2002 (first entry)
XX
XX Mouse truncated prion protein with C terminal cysteine containing linker.
XX
XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
KW molecular scaffold; amyloid beta; A β 1-42; influenza; mutein;
KW graft versus host disease; IGE-mediated allergic reaction; anaphylaxis;
KW adult respiratory distress syndrome; ARDS; Crohn's disease;
KW allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
KW Grave's disease; systemic lupus erythematosus; osteoporosis;
KW inflammatory immune disease; myasthenia gravis; multiple sclerosis;
KW immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
KW angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
KW rheumatoid arthritis; diabetes; infectious disease; factor Xa;
KW enterokinase; cysteine-containing linker.
XX
XX Mus sp.
XX
OS Synthetic.
OS
OS

PN W0200256907-A2.
 XX 25-JUL-2002.
 XX
 PF 21-JAN-2002; 2002MO-IB000168.
 XX
 PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326988P.
 PR 07-NOV-2001; 2001US-0331045P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 PA (NOVS) NOVARTIS PHARMA AG.
 PA (MAUR/) MAURER P.
 PA (LECH/) LECHNER F.
 PA (ORTM/) ORTMANN R.
 PA (LUBO/) LUBOWEND R.
 PA (STAU/) STAUFENBIEL M.
 PA (FREY/) FREY P.
 XX
 PI Maurer P, Lechner F, Ortmann R, Luegend R, Staufenbiel M, Frey P,
 PI Renner WA, Bachmann M, Tisec A, Sebbel P, Piossek C,
 XX MPI, 2002-636514/68.
 XX
 DR Molecular antigen array used in the production of vaccines for infectious
 XX diseases.
 XX
 PT Example 7; Page 415; 418pp; English.
 XX
 PS The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (1) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (1) an antigen or antigenic determinant with at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (1) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (1) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunization and as a vaccine for diseases such as influenza, graft
 CC versus host disease, TGE-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukemia, non-Hodgkin's lymphoma, Graves' disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy, immunoblastic
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein).
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 211; DB 5; Length 124;
 DB Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 NNFVHDCVNITIKOHTVTTTGGNFETETDVGMERVVEQ 40
 53 NNFVHDCVNITIKOHTVTTTGGNFETETDVGMERVVEQ 92

RESULT 6
 ADD24200
 ID ADD24200 standard; protein; 124 AA.
 XX
 AC ADD24200;
 XX
 DT 15-JAN-2004 (first entry)
 XX
 DE mPrPt-EK-Fc* cleaved protein sequence.
 XX
 KW vaccine composition; virus-like particle; core particle;
 KW first attachment site; antigen; antigenic determinant; prion protein;
 KW PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KW prion disease; Bovine Spongiform Encephalopathy; BSE;
 KW Creutzfeldt-Jakob Disease; prion; mPrPt-EK-Fc*.
 XX
 OS unidentified.
 OS
 OS prion.
 XX
 PN W02003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003MO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002MO-IB000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pellicioli E, Renner WA;
 XX MPI; 2003-598483/56.
 XX
 DR A vaccine composition for preventing or treating prion diseases (e.g.
 XX Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phage) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Example 13; SEQ ID NO 93; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or anti-inflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of the cleaved
 CC protein translated from a mouse prion protein (PrP) vector (mPrPt-EK-Fc*)
 CC which was used during the exemplification of the invention.
 XX
 SQ Sequence 124 AA;
 XX
 QY Query Match 100.0%; Score 211; DB 7; Length 124;
 DB Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 1 NNFVHDCVNITIKOHTVTTTGGNFETETDVGMERVVEQ 40
 53 NNFVHDCVNITIKOHTVTTTGGNFETETDVGMERVVEQ 92
 RESULT 7
 AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX

DT 14-JAN-1998 (first entry)
 XX Prion protein peptide Hu 90-231.
 DE
 XX Prion protein; PrP; alpha helical domain; screening; inhibition; binding;
 KW scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KW Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KW Gerstmann-Strausler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 PN MO9716728-A1.
 PD 09-MAY-1997.
 PF 28-OCT-1996; 96MO-US017462.
 XX 02-NOV-1995; 95US-00556823.
 PR (REGC) UNIV CALIFORNIA.
 XX Prusiner SB, Kaneko K, Cohen FE;
 PI WPI; 1997-272248/24.
 DR Prion proteins (PrPs) having at least one alpha-helical domain - used in
 XX assays for screening compounds able to inhibit or decrease the binding of
 PT PrP peptide(s) to cellular prion proteins or peptide(s).
 PS Claim 11; Page 7-38; 50pp; English.
 XX The present sequence represents a prion protein (PrP) peptide. PrP has an
 CC ability to induce a conformational change in cellular prion protein (PrP-
 CC c). Methods, for screening compounds which inhibit the binding of PrP-c
 CC to a PrP peptide, are used for screening for drugs that may be useful in
 CC the treatment prion-related disease e.g scrapie, BSE (bovine spongiform
 CC encephalopathy), CJD (Creutzfeldt-Jakob disease), kuru, GSS (Gerstmann-
 CC Strausler-Scheinker disease) and FFI (fatal familial insomnia)
 CC
 SQ Sequence 142 AA;
 QY Query Match 100.0%; Score 211; DB 2; Length 142;
 Best Local Similarity 100.0%; Pred. No. 1.7e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123
 RESULT 8
 ADB63859
 ID ADB63859 standard; protein; 163 AA.
 XX ADB63859;
 AC
 DT 04-DEC-2003 (first entry)
 XX Human protein encoded by clone ASTR020055570.
 DE
 XX Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
 KW cell regeneration; membrane protein; signal transduction-related protein;
 KW transcription-related protein; osteoporosis; neurological disease;
 KW cancer; tumour.
 XX
 OS Homo sapiens.
 XX EP1308459-A2.
 PN 07-MAY-2003.
 PD 28-MAR-2002; 2002EP-00007401.
 PF
 XX

PR 05-NOV-2001; 2001UP-00379298.
 PR 25-JAN-2002; 2002US-00350978.
 XX (HELI-) HELIX RES INST.
 PA (REAS-) RES ASSOC BIOTECHNOLOGY.
 XX
 PI Iogaki T, Sugiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
 PI Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I,
 PI Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuno Y;
 XX WPI; 2003-450961/43.
 DR N-PSDB; ADB61889.
 XX
 PT New polynucleotides and polypeptides, useful for developing a diagnostic
 PT marker or medicines for regulation of their expression and activity, or
 PT as targets of gene therapy.
 PS Claim 1; Page; 222pp; English.
 XX The invention discloses a polynucleotide comprising a sequence selected
 CC from 1970 fully defined nucleotide sequences which encode novel
 CC polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
 CC or its partial peptide, an antibody binding to the polypeptide or peptide
 CC of the polynucleotide, immunologically assaying the polypeptide or
 CC peptide of the polynucleotide by contacting the polypeptide or peptide
 CC with the antibody of the encoded protein, and observing the binding
 CC between the two, a transformant carrying the polynucleotide in an
 CC expressible manner and an antisense polynucleotide. The oligonucleotide
 CC is useful as a primer for synthesizing the polynucleotide, or as a probe
 CC for detecting the polynucleotide. The polynucleotides and encoded
 CC proteins are useful as pharmaceutical agents and many disease-related
 CC genes may be included in them, for developing a diagnostic marker or
 CC medicines for regulation of their expression and activity, or as targets
 CC of gene therapy. The genes are involved in tissue and/or cell
 CC regeneration. Membrane proteins, signal transduction-related proteins,
 CC transcription-related proteins, disease-related proteins and genes
 CC encoding them can be used as indicators for diseases (e.g. osteoporosis,
 CC neurological diseases, cancer, tumours. The cDNA may be used to regulate
 CC the activity or expression of the encoded protein to treat diseases. The
 CC sequence presented is a protein of the invention. Note: Some of the
 CC sequence data for this patent is not represented in the printed
 CC specification, but is based on sequence information supplied by the
 CC European Patent Office.
 XX
 SQ Sequence 163 AA;
 QY Query Match 100.0%; Score 211; DB 7; Length 163;
 Best Local Similarity 100.0%; Pred. No. 2e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 DB 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
 83 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 122
 RESULT 9
 ABG31907
 ID ABG31907 standard; protein; 200 AA.
 XX ABG31907;
 AC
 DT 05-NOV-2002 (first entry)
 XX Human prion protein related peptide #6.
 DE
 XX Prion; human; follicular dendritic cells; FDC; infection;
 KW blood preparation; food; cosmetic; CJD; Creutzfeldt-Jacob disease.
 XX
 OS Homo sapiens.
 XX WO200261418-A1.
 PN 08-AUG-2002.
 PD

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XX 31-JAN-2002; 2002MO-JP000803.
XX
XX 31-JAN-2001; 2001JP-00024279.
XX
XX (TOHO) UNIV TOHOKU.
XX
XX Kitamoto T, Miyoshi K, Mohri S;
XX WPI; 2002-619277/66.
XX
XX Screening (non-)human prion disease infection factor based on abnormal
XX prion protein sedimentation in non-human follicular dendritic cells as
XX indication, applicable in safety test on e.g. drugs and cosmetics.
XX
XX Example 2; Page 63-64; 69pp; Japanese.
XX
XX This invention relates to a novel method for screening human or non-
XX human prion disease infection factor in a sample by using abnormal prion
XX protein sedimentation in non-human follicular dendritic cells (FDC) as
XX indication. The method of the invention is useful for screening (non-)
XX human prion disease infection factor, which is applicable in safety tests
XX on drugs like blood preparations, foods and cosmetics, and for developing
XX disease (CJD). The method of the invention is simple and quick. The
XX present sequence represents a human prion related protein of the
XX invention
XX
XX Sequence 200 AA;
XX
XX Query Match 100.0%; Score 211; DB 5; Length 200;
XX Best Local Similarity 100.0%; Pred. No. 2.5e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
XX |
XX 143 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 182
XX
XX RESULT 10
XX AAB07316
XX ID AAB07316 standard; protein; 208 AA.
XX
XX AC AAB07316;
XX
XX DT 17-OCT-2000 (first entry)
XX
XX DE Mouse prion protein sequence.
XX
XX OS Mouse; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX MU Mus sp.
XX
XX Key Location/Qualifiers
XX Region 37..68
XX /note= "Repeat region consisting of tandem repeats of
XX repeat unit: PHGGGWGQ (AAB07319)"
XX Disulfide-bond 156..191
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX MO200029850-A1.
XX
XX PD 25-MAY-2000.
XX
XX PF 27-OCT-1999; 99WO-FI000897.
XX
XX PR 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX

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XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 41-42; 50pp; English.
XX
XX The present sequence is the mouse prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of Transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state
XX
XX Sequence 208 AA;
XX
XX Query Match 100.0%; Score 211; DB 3; Length 208;
XX Best Local Similarity 100.0%; Pred. No. 2.6e-20;
XX Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
XX |
XX 150 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 189
XX
XX RESULT 11
XX AAB07318
XX ID AAB07318 standard; protein; 208 AA.
XX
XX AC AAB07318;
XX
XX DT 17-OCT-2000 (first entry)
XX
XX DE Human prion protein sequence.
XX
XX OS Human; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX MU Homo sapiens.
XX
XX Key Location/Qualifiers
XX Region 29..69
XX /note= "Repeat region consisting of tandem repeats of
XX repeat unit: PHGGGWGQ (AAB07319)"
XX Disulfide-bond 157..192
XX Modified-site 208
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX MO200029850-A1.
XX
XX PD 25-MAY-2000.
XX
XX PF 27-OCT-1999; 99WO-FI000897.
XX
XX PR 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
XX

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transmissible spongiform encephalopathies in bovine.

Disclousure; Page 43-44; 50pp; English.

The present sequence is the human prion protein (Prp) sequence.

Conversion of the normal cellular form of Prp into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a Prp epitope is captured by an antibody, which is then detected. The presence of Prp indicates TSE. Prp epitopes (AAB07320-B07326) are derived from the protease resistant core of Prp that is occluded when the Prp is in an aggregated state

Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMERVVEQ 40
151 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMERVVEQ 150

RESULT 12
AAB07327 standard; protein; 208 AA.

AAB07327;
17-OCT-2000 (first entry)

Mouse prion protein sequence.

Mouse; prion protein; transmissible spongiform encephalopathy;
bovine spongiform encephalopathy; TSE diagnosis; Prp.

Mus sp.

Key Location/Qualifiers
Region 37..68
/note="Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"
Disulfide-bond 156..191
Modified-site 208
/note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

WO200029849-A1.

25-MAY-2000.

27-OCT-1999; 99WO-FI000896.

17-NOV-1998; 98FI-00002480.

(WALL-) WALLAC OY.
(BBSR-) BBSRC OFFICE.

Hope J, Barnard GJR, Birkett CR;

WPI; 2000-399778/34.

New immunoassay for prion protein, used for determination of transmissible spongiform encephalopathies in mammals, comprises specific capture antibody.

Disclousure; Page 41-42; 50pp; English.

The present sequence is the mouse prion protein (Prp) sequence.

Conversion of the normal cellular form of Prp into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of this protein in body fluid or tissue samples may be measured by an assay of the present invention, in which a Prp epitope is captured by an antibody, which is then detected. The presence of Prp indicates TSE. Prp epitopes (AAB07320-B07326) are derived from the protease resistant core of Prp that is occluded when the Prp is in an aggregated state

Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;
Best Local Similarity 100.0%; Pred. No. 2.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMERVVEQ 40
150 NNFVHDCVNITIKOHTVTTTGGNFTETDVKKMERVVEQ 189

RESULT 13
AAB07329 standard; protein; 208 AA.

AAB07329;
17-OCT-2000 (first entry)

Human prion protein sequence.

Human; prion protein; transmissible spongiform encephalopathy;
bovine spongiform encephalopathy; TSE diagnosis; Prp.

Homo sapiens.

Key Location/Qualifiers
Region 29..69
/note="Repeat region consisting of tandem repeats of repeat unit: PHGGGWGQ (AAB07319)"
Disulfide-bond 157..192
Modified-site 208
/note="C-terminal phospho-inositol glycolipid membrane anchor (-GPI)"

WO200029849-A1.

25-MAY-2000.

27-OCT-1999; 99WO-FI000896.

17-NOV-1998; 98FI-00002480.

(WALL-) WALLAC OY.
(BBSR-) BBSRC OFFICE.

Hope J, Barnard GJR, Birkett CR;

WPI; 2000-399778/34.

New immunoassay for prion protein, used for determination of transmissible spongiform encephalopathies in mammals, comprises specific capture antibody.

Disclousure; Page 43-44; 50pp; English.

The present sequence is the human prion protein (Prp) sequence.

Conversion of the normal cellular form of Prp into an aggregated, insoluble isoform is implicated in the pathogenesis of Transmissible Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of

CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state
 CC

XX Sequence 208 AA;

Query Match 100.0%; Score 211; DB 3; Length 208;

Best Local Similarity 100.0%; Pred. No. 2.6e-20; Mismatches 0; Indels 0; Gaps 0;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 40

151 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 190

RESULT 14

ABG31902

ABG31902 standard; protein; 208 AA.

ABG31902;

05-NOV-2002 (first entry)

Human prion protein related protein #2.

Prion; human; follicular dendritic cells; FDC; infection;
 blood preparation; food; cosmetic; CUD; Creutzfeldt-Jacob disease.

Homo sapiens.

WO200261418-A1.

08-AUG-2002.

31-JAN-2002; 2002WO-JP000803.

31-JAN-2001; 2001JP-00024279.

(TOHO) UNIV TOHOKU.

Kitamoto T, Miyoshi K, Mohri S;

WPI; 2002-619277/66.

Screening (non-)human prion disease infection factor based on abnormal
 prion protein sedimentation in non-human follicular dendritic cells as
 indication, applicable in safety test on e.g. drugs and cosmetics.

Disclosure; Page 49-50; 69pp; Japanese.

This invention relates to a novel method for screening human or non-
 human prion disease infection factor in a sample by using abnormal prion
 protein sedimentation in non-human follicular dendritic cells (FDC) as
 indication. The method of the invention is useful for screening (non-)
 human prion disease infection factor, which is applicable in safety tests
 on drugs like blood preparations, foods and cosmetics, and for developing
 drugs for e.g. CUD, as well as for early diagnosis of Creutzfeldt-Jacob
 disease (CUD). The method of the invention is simple and quick. The
 present sequence represents a human prion related protein of the
 invention

Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;

Best Local Similarity 100.0%; Pred. No. 2.6e-20; Mismatches 0; Indels 0; Gaps 0;

1 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 40

151 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 190

RESULT 15

ABG31904

ABG31904 standard; protein; 208 AA.

05-NOV-2002 (first entry)

Chimera-type prion protein #2.

Prion; follicular dendritic cells; FDC; infection; blood preparation;
 food; cosmetic; CUD; Creutzfeldt-Jacob disease.

Synthetic.

WO200261418-A1.

08-AUG-2002.

31-JAN-2002; 2002WO-JP000803.

31-JAN-2001; 2001JP-00024279.

(TOHO) UNIV TOHOKU.

Kitamoto T, Miyoshi K, Mohri S;

WPI; 2002-619277/66.

Screening (non-)human prion disease infection factor based on abnormal
 prion protein sedimentation in non-human follicular dendritic cells as
 indication, applicable in safety test on e.g. drugs and cosmetics.

Claim 9; Page 55-57; 69pp; Japanese.

This invention relates to a novel method for screening human or non-
 human prion disease infection factor in a sample by using abnormal prion
 protein sedimentation in non-human follicular dendritic cells (FDC) as
 indication. The method of the invention is useful for screening (non-)
 human prion disease infection factor, which is applicable in safety tests
 on drugs like blood preparations, foods and cosmetics, and for developing
 drugs for e.g. CUD, as well as for early diagnosis of Creutzfeldt-Jacob
 disease (CUD). The method of the invention is simple and quick. The
 present sequence represents a chimeric type prion related protein of the
 invention

Sequence 208 AA;

Query Match 100.0%; Score 211; DB 5; Length 208;

Best Local Similarity 100.0%; Pred. No. 2.6e-20; Mismatches 0; Indels 0; Gaps 0;

1 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 40

151 NNPFVHDCVNITIKQHTVTTTNGENFTETDVGMERVVEQ 190

Search completed: December 3, 2004, 00:55:40

Job time : 66.2295 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-23_Copy_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITTKQHTVTTTNGENFTEDVKKMERVVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: p1r1:*
2: p1r2:*
3: p1r3:*
4: p1r4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	* Query Length	ID	Description
1	211	100.0	226 2 A53892	prion-related prot
2	211	100.0	232 2 S71041	major prion protei
3	211	100.0	241 2 S71048	major prion protei
4	211	100.0	241 2 S71056	major prion protei
5	211	100.0	245 2 S71045	major prion protei
6	211	100.0	253 1 UJHU	major prion protei
7	211	100.0	253 2 S18423	major prion protei
8	211	100.0	253 2 S71055	major prion protei
9	211	100.0	253 2 S53635	prion protein - si
10	211	100.0	253 2 I37032	major prion protei
11	211	100.0	253 2 I61847	major prion protei
12	211	100.0	254 2 B34759	prion protein - go
13	211	100.0	254 2 A34759	prion protein - Ch
14	211	100.0	254 2 A23544	major prion protei
15	210	99.5	252 2 I61848	major prion protei
16	209	99.1	264 2 S71137	prion protein - gr
17	206	97.6	245 2 S53627	major prion protei
18	206	97.6	252 2 S53634	major prion protei
19	206	97.6	252 2 S53631	major prion protei
20	206	97.6	253 2 S53624	major prion protei
21	206	97.6	253 2 S53633	major prion protei
22	206	97.6	253 2 S53620	major prion protei
23	206	97.6	253 2 S53625	major prion protei
24	206	97.6	253 2 S53617	major prion protei
25	206	97.6	253 2 S53614	major prion protei
26	206	97.6	253 2 S53616	major prion protei
27	206	97.6	253 2 S53618	major prion protei
28	206	97.6	253 2 S53619	major prion protei
29	206	97.6	254 1 UJHYTH	major prion Prp-Sc

30	206	97.6	256 2 JU0268	major prion protei
31	206	97.6	257 2 A23545	major prion Prp27-
32	206	97.6	264 2 A54330	major prion protei
33	205	97.2	256 2 S37149	prion protein - go
34	205	97.2	256 2 A54281	major prion protei
35	205	97.2	260 2 S53629	major prion protei
36	203	96.2	257 2 JU1900	major prion protei
37	202	95.7	239 2 S53633	major prion protei
38	200	94.8	252 2 JC6175	prion protein - ra
39	61	28.9	267 1 UJCH	major prion protei
40	61	28.9	267 2 A37372	prion protein homo
41	61	28.9	273 2 A46280	prion protein - ch
42	58	27.5	139 2 H90004	hypothetical prote
43	57	27.0	853 2 T08162	amyloidululnase (
44	56	26.5	511 2 C69199	phenylalanine-cRNA
45	55	26.1	648 2 T47895	hypothetical prote

ALIGNMENTS

RESULT 1
A53892
prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
C/Accession: A53892 Z.; Lim, E.; Lackey, A.; Woo, C.H.; Buton, J.D.; Clawson, G.A.
R;Liao, Y.C.; Tokens
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A/Reference number: A53892; MUID:88037055; PMID:288948
A/Accession: A53892
A>Status: preliminary
A/Molecule type: mRNA
A/Residues: 1-226 <L1A>
A/Cross-references: UNIPROT:P13852; GB:M20313; NID:G206391; PIDN:AAA41947.1; PID:G206392
C/Superfamily: major prion protein

Query Match 100.0%; Score 211; DB 2; Length 226;
Best Local Similarity 100.0%; Pred. No. 8.6e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITTKQHTVTTTNGENFTEDVKKMERVVEQ 40
Db 145 NNFVHDCVNITTKQHTVTTTNGENFTEDVKKMERVVEQ 184

RESULT 2

S71041
major prion protein - black-handed spider monkey (fragment)
C/Species: Ateles geoffroyi (black-handed spider monkey)
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71041; S53630
R;Schatz, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71041
A/Molecule type: DNA
A/Residues: 1-232 <SCH>
R;Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53630
A>Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-194, 'R', 196-231 <SCH>
A/Cross-references: EMBL:U08309
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 232;

Best Local Similarity 100.0%; Pred. No. 8.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 40
|||||

Db 157 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 196
|||||

RESULT 3

major prion protein - Calliobus moloch (fragment)

C:Species: Calliobus moloch

C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71048; S53632

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71048

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50001.1; PID:g4755

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53632

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08312

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 40
|||||

Db 166 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 205
|||||

RESULT 4

major prion protein - mandrill (fragment)

C:Species: Papio sphinx, Mandrillus sphinx (mandrill)

C:Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71056; S53621

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71056

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g4743

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53621

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08303

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 241;
Best Local Similarity 100.0%; Pred. No. 9.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 40
|||||

Db 166 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 205
|||||

RESULT 5

major prion protein - Cercopithecus diana

C:Species: Cercopithecus diana

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71045; S53628

R:Schatzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71045

A:Molecule type: DNA

A:Residues: 1-245 <SCH>

A:Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g47434

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53628

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>

A:Cross-references: EMBL:U08292

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 245;
Best Local Similarity 100.0%; Pred. No. 9.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 40
|||||

Db 165 NNFDVCNITIKOHTVTTTNGENFTETDVKMERVEQ 204
|||||

RESULT 6

major prion protein precursor - human

N:Alternate names: 11K amyloid protein; 27-30Kialoglycoprotein; PrP 27-30; PrP 33-35C;

C:Species: Homo sapiens (man)

C:Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 09-Jul-2004

C:Accession: A24173; A40372; A05017; S14078; I54322; I68597; I59184; I79633; I796

R:Kretzschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.; Del

DNA 5, 315-324, 1986

A:Title: Molecular cloning of a human prion protein cDNA.

A:Reference number: A24173; MUID:86300093; PMID:3755672

A:Accession: A24173

A:Molecule type: mRNA

A:Residues: 1-253 <KRB>

A:Cross-references: UNIPROT:P04156; GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468

R:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.

Am. J. Hum. Genet. 49, 320-329, 1991

A:Title: Genomic structure of the human prion protein gene.

A:Reference number: A40372; MUID:91328137; PMID:1678248

A:Accession: A40372

A:Status: not compared with conceptual translation

A:Molecule type: DNA

A:Residues: 1-80, 89-253 <PUC>

A:Cross-references: GB:X63446; NID:g747846; PIDN:CAA58442.1; PID:g747847

A>Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could not be

aligned. Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.

Science 233, 354-367, 1986

A:Reference number: A05017; MUID:86261778; PMID:3014653

A:Accession: A05017

A:Molecule type: mRNA

A:Residues: 8-117, 119-253 <LIA>

A:Cross-references: GB:D00015; NID:g220015; PIDN:BAA00011.1; PID:g220016; GB:M13667; NID:

R:Tagliachini, F.; Pretelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Farlow,

EMBO J. 10, 513-519, 1991

A:Title: Amyloid protein of Gerstmann-Sträussler-Scheinker disease (Indiana kindred) is

A:Reference number: S14078; MUID:91160504; PMID:1672107

A:Accession: S14078
A:Molecule type: protein
A:Residues: 56-72,'X','74'-76,'XX','79','XXX','83-86;111-128','V','130-150 <TAG>
R.;Diedrich, J.F., Knopman, D.S., List, J.F., Olson, K., Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A>Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322; MUID:93250789; PMID:1363802
A:Accession: I54322
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 9-83,'92-240 <RES>
A:Cross-references: GB:M81929; NID:g190517; PIDN:AAB59442.1; PID:g190518
A:Accession: I68597
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 8-240 <RB3>
A:Cross-references: GB:S80539; NID:g190519; PIDN:AAB59443.1; PID:g190520
R.;Brown, P.;Goldfarb, L.G.;McCombie, W.R.;Nietero, A.;Squillacote, D.;Sheremata, W.;
Neurology 42, 422-427, 1992
A>Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert mutation
A:Reference number: I58135; MUID:92140671; PMID:11736177
A:Accession: I58135
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 51-91,'PHGGMGQPHGGMGQP'PHGGMGQPHGGMGQPHGGMGQPHGGMG' <RES>
A:Cross-references: GB:S80539; NID:g244638; PIDN:AAB21334.1; PID:g244639
R.;Goldfarb, L.G.;Brown, P.;McCombie, W.R.;Goldgaber, D.;Swergold, G.D.;Willis, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven, and
A:Reference number: I59184; MUID:92073400; PMID:1663708
A:Accession: I59184
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
A:Cross-references: GB:S71208; NID:g239877; PIDN:AAB20521.1; PID:g239878; GB:S71210; NID:
C.Genetic:GB:
A:Gene: GDB:PMP, CJD, PRP
A:Cross-references: GDB:I20720, OMIM:176640, OMIM:137440
A:Map position: 20pter-20p12
A:introns: #status absent
A>Note: one intron occurs before the initiator codon
A>Note: this gene is associated with Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler
C.Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
F.1-22/Domains: signal sequence #status predicted <SIG>
F.23-23/Product: major prion protein #status predicted <MNT>
F.54-92/Region: 8-residue repeats (P-H-G-G-W-G-Q)
F.231-253/Domains: carboxyl-terminal proppeptide #status predicted <TRP>
F.179-214/Distulfide bonds: #status predicted
F.118,137/Binding site: carbohydrate (Asn) (covalent) #status predicted
F.230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match	Best Local Similarity	Score	DB 1:	Length
Matches 40;	Conservative	100.0%;	Pred. No. 9.7e-20;	253;
	Mismatches	0;	Indels	0;
	Gaps	0;		

Db 173 NNFFHDCVNITIKOHTVTTTTNGENFTETDVKMERVVQQ 40
NNFFHDCVNITIKOHTVTTTTNGENFTETDVKMERVVQQ 212

RESULT 7
184423
major prion protein precursor - rhesus macaque
C.Species: Macaca mulatta (rhesus macaque)
C.Date: 24-May-1996 #sequence revision 24-May-1996 #text_change 09-Jul-2004
C.Accession: I84423; S53622; S71054
R.;Cervankova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental t
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I84423
A>Status: preliminary; translated from GB/EMBL/DDBJ

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A: Molecule type: DNA
A: Residues: 1-253 <RSS>
A: Cross-references: UNIPROT:P40254; EMBL:U15163; NID:g595850; PIDN:AAA68635.1; PID:g59584
R: Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A: Title: Prion protein gene variation among primates.
A: Reference number: S53614; MUID:95139066; PMID:7837269
A: Accession: S53622
A: Status: nucleic acid sequence not shown
A: Molecule type: DNA
A: Residues: 1-210, 'R', 212-253 <SCH>
A: Cross-references: EMBL:U08307
R: Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A: Reference number: S71041
A: Accession: S71054
A: Molecule type: DNA
A: Residues: 1-253 <SCM>
A: Cross-references: EMBL:U08307; NID:g474372; PIDN:AAC50095.1; PID:g474373
C: Superfamily: major prion protein
C: Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1  NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
      |||||
Db      173  NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 212

RESULT 8
S71055
major prion protein - pig-tailed macaque
C: Species: Macaca nemestrina (pig-tailed macaque)
C: Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C: Accession: S71055; S53626
R: Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A: Reference number: S71041
A: Accession: S71055
A: Molecule type: DNA
A: Residues: 1-253 <SCH>
A: Cross-references: UNIPROT:P40254; EMBL:U08306; NID:g474370; PIDN:AAC50094.1; PID:g474373
R: Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A: Title: Prion protein gene variation among primates.
A: Reference number: S53614; MUID:95139066; PMID:7837269
A: Accession: S53626
A: Status: nucleic acid sequence not shown
A: Molecule type: DNA
A: Residues: 8-210, 'R', 212-247 <SCM>
A: Cross-references: EMBL:U08306
C: Superfamily: major prion protein
C: Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1  NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 40
      |||||
Db      173  NNPFVHDCVNITIKOHTVTTTGGENFTETDVKKMERVVEQ 212

RESULT 9
S53635
prion protein - siamang
C: Species: Hylobates syndactylus (siamang)
C: Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 09-Jul-2004
C: Accession: S53635
R: Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995

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A>Title: Pion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837266
A/Accession: S53615
A/Status: nucleic acid sequence not shown; translation not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: UNIPROT:P61767; EMBL:U08308; NID:g474374; PIDN:AA05096.1; PID:g4743
A/Note: The source was designated as Symphalangus syndactylus
A/Note: the nucleotide sequence was submitted to the EMBL Data Library, April 1994
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 10
137032
major pion protein precursor - gorilla
C/Species: Gorilla gorilla (gorilla)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: I37032
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I37032
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P40252; EMBL:U15166; NID:G563208; PIDN:AAA68633.1; PID:G5632
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 11
161847
major pion protein precursor - chimpanzee
C/Species: Pan troglodytes (chimpanzee)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: I61847; S71060; S53615
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I61847
A/Status: translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-references: UNIPROT:P61768; EMBL:U15039; NID:G609303; PIDN:AAA68632.1; PID:G6093
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71060
A/Molecule type: DNA
A/Residues: 1-253 <SCM>
A/Cross-references: EMBL:U08296; NID:g474350; PIDN:AA05085.1; PID:g474351
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Pion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837266
A/Accession: S53615

A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210, 'R', 212-253 <SCH>
A/Cross-references: EMBL:U08296
C/Superfamily: major pion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; pion; scrapie

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 12
B34759
pion protein - golden hamster
C/Species: Mesocricetus auratus (golden hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 13-Aug-1999
C/Accession: B34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: B34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: GB:M33959; NID:G191182; PIDN:AAA37014.1; PID:G191183
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 13
A34759
pion protein - Chinese hamster
C/Species: Cricetus griseus (Chinese hamster)
C/Date: 13-Jul-1990 #sequence_revision 13-Jul-1990 #text_change 09-Jul-2004
C/Accession: A34759
R/Lowenstein, D.H.; Butler, D.A.; Westaway, D.; McKinley, M.P.; DeArmond, S.J.; Prusiner,
Mol. Cell. Biol. 10, 1153-1163, 1990
A/Title: Three hamster species with different scrapie incubation times and neuropathology
A/Reference number: A34759; MUID:90158578; PMID:2406562
A/Accession: A34759
A/Status: preliminary
A/Molecule type: DNA
A/Residues: 1-254 <LOW>
A/Cross-references: UNIPROT:O60506; GB:M33958; NID:G191180; PIDN:AAA37013.1; PID:G387056
C/Superfamily: major pion protein

Query Match 100.0%; Score 211; DB 2; Length 254;
Best Local Similarity 100.0%; Pred. No. 9.7e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 14
A23544
major pion protein precursor - mouse
N/Alternate names: PrP; Scrapie pion
C/Species: Mus musculus (house mouse)

C/Date: 22-Jul-1987 #sequence revision 22-Jul-1987 #text_change 09-Jul-2004

C/Accession: A29669; A23544; S02521; A22315

R/Westaway, D.; Goodman, P.A.; Miranda, C.A.; McKinley, M.P.; Carlson, G.A.; Prusiner, S. Cell 51, 651-662, 1987

A/Title: Distinct prion proteins in short and long scrapie incubation period mice.

A/Reference number: A29669; MUID:88052869; PMID:2890436

A/Accession: A29669

A/Molecule type: DNA

A/Residues: 1-254 <MES>

A/Cross-references: UNIPROT:P04925; GB:M18070; NID:G200528; PIDN:AAA39997.1; PID:G200529

A/Experimental source: strains NZW and I/LmJ

A/Note: the sequence shown is from the NZW strain; the sequence from the I/LmJ strain differs by 1 residue, C to G, at position 196

A/Proc. Natl. Acad. Sci. U.S.A. 83, 6372-6376, 1986

A/Reference number: A23544; MUID:86313583; PMID:3462700

A/Accession: A23544

A/Molecule type: mRNA

A/Residues: 1-254 <LOC>

R/Hope, V.; Multhaup, G.; Reekie, L.J.D.; Kimberlin, R.H.; Beyreuther, K.

Eur. J. Biochem. 172, 271-277, 1988

A/Title: Molecular pathology of scrapie-associated fibril protein (PrP) in mouse brain

A/Reference number: S02521; MUID:88166695; PMID:2894984

A/Accession: S02521

A/Molecule type: protein

A/Residues: 1-254 <HOP>

R/Chesebro, B.; Race, R.; Wehrly, K.; Nishio, J.; Bloom, M.; Lechner, D.; Bergstrom, S.

Nature 315, 331-333, 1985

A/Title: Identification of scrapie prion protein-specific mRNA in scrapie-infected and uninfected mice

A/Reference number: A22315; MUID:85213844; PMID:3923361

A/Accession: A22315

A/Molecule type: mRNA

A/Residues: 87-132, 'V', 134-164 <CHB>

C/Superfamily: major prion protein

C/Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidylcholine

F/1-32/Domain: signal sequence #status predicted <SIG>

F/23-231/Product: major prion protein #status predicted <MAT>

F/232-254/Domain: carboxyl-terminal propeptide #status predicted <CTP>

F/178-213/Disulfide bonds: #status predicted

F/180-196/Binding site: carboxylate (Asn) (covalent) #status predicted

F/231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form)

Query Match 100.0%; Score 211; DB 2; Length 254;

Best Local Similarity 100.0%; Pred. No. 9.7e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNIITKQHTVTTTGGNFETDVKMERVVEQ 40

DB 172 NNFVHDCVNIITKQHTVTTTGGNFETDVKMERVVEQ 211

RESULT 15

161848
major prion protein precursor - common squirrel monkey
C/Species: Samia securus (common squirrel monkey)
C/Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 09-Jul-2004
C/Accession: 161848
R/Cervanekova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: 136907; MUID:95083661; PMID:7991600
A/Accession: 161848
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-252 <RES>
A/Cross-references: UNIPROT:P40258; EMBL:U15165; NID:G5595852; PIDN:AAA68636.1; PID:G55958
C/Superfamily: major prion protein

DB 172 NNFVHDCVNIITKQHTVTTTGGNFETDVKMERVVEQ 211

Search completed: December 3, 2004, 00:38:41
Job time: 13 secs

THE NEW BLANK (CSTO)

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 64.6557 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218
Perfect score: 211
Sequence: 1 NNFVHDCVNTTKQHTVTTKGENTFDVKMERVQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues
Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database: UniProt 02:.*
1: uniprot_sprot:.*
2: uniprot_trembl:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	211	100.0	232	1	P40246 atelae geof
2	211	100.0	238	1	P40246 atelae geof
3	211	100.0	238	1	P40246 atelae geof
4	211	100.0	238	2	P40246 atelae geof
5	211	100.0	240	2	P40246 atelae geof
6	211	100.0	241	1	P40246 atelae geof
7	211	100.0	241	1	P40246 atelae geof
8	211	100.0	245	1	P40246 atelae geof
9	211	100.0	246	1	P40246 atelae geof
10	211	100.0	246	1	P40246 atelae geof
11	211	100.0	246	1	P40246 atelae geof
12	211	100.0	246	1	P40246 atelae geof
13	211	100.0	246	2	P40246 atelae geof
14	211	100.0	248	2	P40246 atelae geof
15	211	100.0	252	1	P40246 atelae geof
16	211	100.0	252	1	P40246 atelae geof
17	211	100.0	253	1	P40246 atelae geof
18	211	100.0	253	1	P40246 atelae geof
19	211	100.0	253	1	P40246 atelae geof
20	211	100.0	253	1	P40246 atelae geof
21	211	100.0	253	1	P40246 atelae geof
22	211	100.0	253	1	P40246 atelae geof
23	211	100.0	253	1	P40246 atelae geof
24	211	100.0	253	1	P40246 atelae geof
25	211	100.0	253	1	P40246 atelae geof
26	211	100.0	253	2	P40246 atelae geof
27	211	100.0	253	2	P40246 atelae geof
28	211	100.0	253	2	P40246 atelae geof
29	211	100.0	253	2	P40246 atelae geof
30	211	100.0	253	2	P40246 atelae geof
31	211	100.0	254	1	P40246 atelae geof

32	211	100.0	254	1	P40246 atelae geof
33	211	100.0	254	1	P40246 atelae geof
34	211	100.0	254	1	P40246 atelae geof
35	211	100.0	254	1	P40246 atelae geof
36	211	100.0	254	2	P40246 atelae geof
37	211	100.0	254	2	P40246 atelae geof
38	211	100.0	254	2	P40246 atelae geof
39	211	100.0	277	2	P40246 atelae geof
40	211	100.0	277	2	P40246 atelae geof
41	211	100.0	285	2	P40246 atelae geof
42	210	99.5	220	2	P40246 atelae geof
43	210	99.5	248	2	P40246 atelae geof
44	210	99.5	260	1	P40246 atelae geof
45	209	99.1	215	2	P40246 atelae geof

ALIGNMENTS

RESULT 1
ID P40246; STANDARD; PRT; 232 AA.
AC P40246;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRP;
OS Ateles Geoffroyi (Black-handed spider monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
OX NCBI_TaxID=9509;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -!- FUNCTION: The function of Prp is not known. Prp is encoded in the host genome and is expressed both in normal and infected cells.
CC -!- SUBUNIT: Prp has a tendency to aggregate yielding polymers called "rods".
CC -!- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -!- DISEASE: Prp is found in high quantity in the brain of humans and animals infected with the degenerative neurological diseases kuru, Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome (GSS), scrapie, bovine spongiform encephalopathy (BSE), transmissible mink encephalopathy (TME), etc.
CC -!- SIMILARITY: Belongs to the prion family.
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CC EMBL: U08309; AAC50097.1; --
CC PIR: S71041; S71041.
CC HSSP: P23907; 1604.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00705; PRION_2; 1.
DR PROSITE: PS00705; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 15 By similarity.
FT CHAIN 16 214 Major prion protein.
FT PROPEP 215 >232 Removed in mature form (By similarity).
FT LIPID 214 214 GPI-anchor amidated serine (By

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FT DISULFID 163 198 similarity).
FT CARBOHYD 165 165 By similarity.
FT CARBOHYD 181 181 N-linked (GlcNAc... ) (potential).
FT DOMAIN 44 84 N-linked (GlcNAc... ) (potential).
FT REPEAT 44 51 4 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 52 59 0.
FT REPEAT 60 67 1.
FT REPEAT 68 75 2.
FT NON TER 232 232 3.
SQ SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match 100.0%; Score 211; DB 1; Length 232;
Best Local Similarity 100.0%; Pred. No. 3.5e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGKGFETEDVKKMERVVEQ 40
Db 157 NNFVHDCVNITIKOHTVTTTGTGKGFETEDVKKMERVVEQ 196

RESULT 2
PRIO CERAT STANDARD; PRT; 238 AA.
AC Q95145; Q95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus aethiops, and
OS Macaca sylvana (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecidae;
OX NCBI_TaxID=36222, 9546;
RN [1]
RS SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75384; AAB50623.1; -
CC EMBL; U75382; AAB50629.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00391; Prion_octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.

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FT NON TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 238 Removed in mature form (By similarity).
FT LIPID 215 215 GPI-anchor amidated serine (By
FT similarity).
FT DISULFID 164 199 By similarity.
FT CARBOHYD 166 166 N-linked (GlcNAc... ) (potential).
FT CARBOHYD 182 182 N-linked (GlcNAc... ) (potential).
FT DOMAIN 44 76 4 x 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
SQ SEQUENCE 238 AA; 26123 MW; 5F59A3BEC3E3531B CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGKGFETEDVKKMERVVEQ 40
Db 158 NNFVHDCVNITIKOHTVTTTGTGKGFETEDVKKMERVVEQ 197

RESULT 3
PRIO THEGE STANDARD; PRT; 238 AA.
AC Q95270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PRNP; Synonyms=PRP;
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecidae;
OX NCBI_TaxID=9565;
RN [1]
RS SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudamit J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RT protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC
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CC
CC EMBL; U75383; AAB50630.1; -
CC HSSP; P23907; IG04.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC Pfam; PF00391; Prion_octapep; 5.
CC PRINTS; PR00341; PRION.
CC PROSITE; PS00291; PRION_1; 1.

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DR PROSITE: PS00706; PRION_2; 1.
KM Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT NON_TER 1 1
FT SIGNAL <1 15 By similarity.
FT CHAIN 16 215 Major prion protein.
FT PROPEP 216 >238 Removed in mature form (By similarity).
FT DISULFID 164 199 By similarity.
FT LIPID 215 215 GPI-anchor amidated serine (By similarity).
FT CARBOHYD 166 166 N-linked (GLCNAC...) (Potential).
FT CARBOHYD 182 182 N-linked (GLCNAC...) (Potential).
FT DOMAIN 44 83 4 x 8 AA tandem repeats of P-H-G-G-G-W-G-Q.
FT REPEAT 44 52 1.
FT REPEAT 53 60 2.
FT REPEAT 61 68 3.
FT REPEAT 69 75 4.
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26104 MW; 5F59BF602243EDB CRC64;

Query Match 100.0%; Score 211; DB 1; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 4
Q86XR1 PRELIMINARY; PRT; 238 AA.
AC Q86XR1;
DT 01-JUN-2003 (TRENBLREL. 24, Created)
DT 01-JUN-2003 (TRENBLREL. 24, Last sequence update)
DT 01-MAR-2004 (TRENBLREL. 26, Last annotation update)
DE Prion protein (Fragment).
GN Name=PRNP;
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
OC NCBI_TaxID=9606;
OX [1]
RN SEQUENCE FROM N.A.
RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY219882; AA083635.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF03991; Prion octapep; 5.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 238 238
SQ SEQUENCE 238 AA; 26108 MW; EC9FA42623F3BBAB CRC64;

Query Match 100.0%; Score 211; DB 2; Length 238;
Best Local Similarity 100.0%; Pred. No. 3.6e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 158 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 197

RESULT 5
Q8VHV4 PRELIMINARY; PRT; 240 AA.
AC Q8VHV4;

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DT 01-MAR-2002 (TRENBLREL. 20, Created)
DT 01-MAR-2002 (TRENBLREL. 20, Last sequence update)
DT 01-JUN-2003 (TRENBLREL. 24, Last annotation update)
DE Prion protein (Fragment).
GN Name=Prp;
OS Microtus agrestis (Short-tailed field vole).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
OC Microtus.
OC NCBI_TaxID=29092;
OX [1]
RN SEQUENCE FROM N.A.
RA Dell'Omo G., Agrimi U., Di Bari M., Windl O., Vaccari G., Nonno R.,
RA Di Gardo G., Kretschmar H.A., Wolfer D.P., Lipp H.P.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AF367625; AL57232.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
FT NON_TER 1 1
FT NON_TER 240 240
SQ SEQUENCE 240 AA; 26308 MW; BCA4EDD3F5F76693 CRC64;

Query Match 100.0%; Score 211; DB 2; Length 240;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 204

RESULT 6
PRIO_CALMO
ID PRIO_CALMO STANDARD; PRT; 241 AA.
AC P40248;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Callitriche moloch (Duckbill).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitrichinae;
OC Callitriche.
OC NCBI_TaxID=9523;
OX [1]
RN SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates."
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases Kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08312; AAC50100.1; -.
DR PIR; S71048; S71048.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT FT NON_TER 1 15 By similarity.
FT SIGNAL <1 15 Major prion protein.
FT CHAIN 16 223 Removed in mature form (By similarity).
FT PROPEP 224 >241 By similarity.
FT DISULFID 172 207 GPI-anchor amidated serine (By
FT LIPID 223 similarity).
FT CARBOHYD 174 174 N-linked (GlcNAc... ) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 77 84 4.
FT REPEAT 241 241 5.
FT NON_TER 241 241
FT SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 7
PRIO_MANSP STANDARD; PRT; 241 AA.
AC P40255;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Mandrillus sphinx (Mandrill) (Papio sphinx).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Mandrillus.
OX NCBI_TaxID=9561;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),

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CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC -----
DR EMBL; U08303; AAC50091.1; -.
DR PIR; S71056; S71056.
DR HSSP; P23907; 1G04.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion_octapep; 6.
DR PRINTS; PR00341; PRION.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
DR Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
KW NON_TER 1 15 By similarity.
FT SIGNAL <1 15 Major prion protein.
FT CHAIN 16 223 Removed in mature form (By similarity).
FT PROPEP 224 >241 GPI-anchor amidated serine (By
FT LIPID 223 similarity).
FT DISULFID 172 207 By similarity.
FT CARBOHYD 174 174 N-linked (GlcNAc... ) (Potential).
FT CARBOHYD 190 190 N-linked (GlcNAc... ) (Potential).
FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 77 84 4.
FT REPEAT 241 241 5.
FT NON_TER 241 241
FT SEQUENCE 241 AA; 26398 MW; E539D84E2E2B59DE CRC64;

Query Match 100.0%; Score 211; DB 1; Length 241;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 40
Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVVEQ 205

RESULT 8
PRIO_CERAE STANDARD; PRT; 245 AA.
AC P40250;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).
GN Name=PRNP;
OS Cercopithecus aethiops (Green monkey) (Grivet), and
OC Cercopithecus diana (Diana monkey).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=9534; 36224;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called

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CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISBASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
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CC      -----
DR      EMBL; U08291; AAC50080.1; -.
DR      EMBL; U08292; AAC50081.1; -.
DR      PIR; S53627; S53627.
DR      PIR; S71045; S71045.
DR      HSSP; P23907; IG04.
DR      InterPro; IPR000817; Prion.
DR      Pfam; PF03991; Prion; octapep; 5.
DR      PRINTS; PR00341; PRION.
DR      PROSITE; PS00291; PRION_1; 1.
DR      PROSITE; PS00706; PRION_2; 1.
DR      KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL 1 22
FT      CHAIN 23 222
FT      PROPEP 223 245
FT      LIPID 222 242
FT      FT
FT      DISULFID 171 206
FT      CARBOHYD 173 173
FT      CARBOHYD 189 189
FT      DOMAIN 51 83
FT      FT
FT      REPEAT 51 59
FT      REPEAT 60 67
FT      REPEAT 68 75
FT      REPEAT 76 83
FT      FT
SQ      SEQUENCE 245 AA; 26885 MW; D582B58E2726C99A CRC64;
Query Match 100.0%; Score 211; DB 1; Length 245;
Best Local Similarity 100.0%; Pred. No. 3.7e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB      165 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 204
RESULT 9
PRTIO_CERMO STANDARD; PRT; 246 AA.
AC P61761; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus mona (Mona monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36226;
RN [1]
RP SEQUENCE FROM N.A.
RT "Evidence for an increased substitution rate of the hominoid prion
protein gene during the period of brain expansion."

```

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RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC      host genome and is expressed both in normal and infected cells.
CC      -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC      "rods".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISBASE: Prp is found in high quantity in the brain of humans and
CC      animals infected with the degenerative neurological diseases kuru,
CC      Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC      (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC      transmissible mink encephalopathy (TME), etc.
CC      -1- SIMILARITY: Belongs to the prion family.
CC      -----
CC      This SWISS-PROT entry is copyright. It is produced through a collaboration
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CC      entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC      or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL; U75386; AAB50625.1; -.
DR      HSSP; P23907; IG04.
DR      InterPro; IPR000817; Prion.
DR      Pfam; PF03991; Prion; octapep; 6.
DR      PRINTS; PR00341; PRION.
DR      PROSITE; PS00291; PRION_1; 1.
DR      PROSITE; PS00706; PRION_2; 1.
DR      KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT      SIGNAL 1 15
FT      CHAIN 16 223
FT      PROPEP 224 246
FT      LIPID 223 223
FT      FT
FT      DISULFID 172 207
FT      CARBOHYD 174 174
FT      CARBOHYD 190 190
FT      DOMAIN 44 84
FT      FT
FT      REPEAT 44 52
FT      REPEAT 53 60
FT      REPEAT 61 68
FT      REPEAT 69 76
FT      REPEAT 77 84
FT      FT
SQ      SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
DB      166 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 205
RESULT 10
PRTIO_CERNE STANDARD; PRT; 246 AA.
AC P61762; Q95172; Q95173;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN Name=PRNP;
OS Cercopithecus neglectus (Debrassa's monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36227;
RN [1]
RP SEQUENCE FROM N.A.

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RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U75387; AAB50626.1; -.
CC HSRP; P23907; I604.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PF00391; Prion; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC FT NON_TER 1 1
CC FT SIGNAL <1 15 By similarity.
CC FT CHAIN 16 223 Major prion protein.
CC FT PROPEP 224 246 Removed in mature form (By similarity).
CC FT LIPID 223 223 GPI-anchor amidated serine (By
CC similarity).
CC FT DISULFID 172 207 By similarity.
CC FT CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
CC FT CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
CC FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC FT REPEAT 44 52 0.
CC FT REPEAT 53 60 1.
CC FT REPEAT 61 68 2.
CC FT REPEAT 69 76 3.
CC FT REPEAT 77 84 4.
CC FT REPEAT 77 84 5.
CC SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
SQ
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVMKMERVVEQ 40
DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVMKMERVVEQ 205
RESULT 11
PRIO_CERTO
ID PRIO_CERTO STANDARD; PRT; 246 AA.
AC Q95176;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.

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OX NCBI_TaxID=9531;
RN [1]
RP SEQUENCE FROM N.A.
RA van der Kuyl A.C., Dekker J.T., Goudemits J.;
RT "Evidence for an increased substitution rate of the hominoid prion
RL protein gene during the period of brain expansion.";
RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
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CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U75385; AAB50628.1; -.
CC HSRP; P23907; I604.
CC InterPro; IPR000817; Prion.
CC Pfam; PF00377; Prion; 1.
CC PRINTS; PF00391; Prion; 1.
CC PROSITE; PS00291; PRION_1; 1.
CC PROSITE; PS00706; PRION_2; 1.
CC KMW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
CC FT NON_TER 1 1
CC FT SIGNAL <1 15 By similarity.
CC FT CHAIN 16 223 Major prion protein.
CC FT PROPEP 224 246 Removed in mature form (By similarity).
CC FT LIPID 223 223 GPI-anchor amidated serine (By
CC similarity).
CC FT DISULFID 172 207 By similarity.
CC FT CARBOHYD 174 174 N-linked (GlcNAc...) (potential).
CC FT CARBOHYD 190 190 N-linked (GlcNAc...) (potential).
CC FT DOMAIN 44 84 5 X 8 AA tandem repeats of P-H-G-G-W-G-
CC FT REPEAT 44 52 0.
CC FT REPEAT 53 60 1.
CC FT REPEAT 61 68 2.
CC FT REPEAT 69 76 3.
CC FT REPEAT 77 84 4.
CC FT REPEAT 77 84 5.
CC SEQUENCE 246 AA; 26914 MW; F5679CBBEC5AD7 CRC64;
SQ
Query Match 100.0%; Score 211; DB 1; Length 246;
Best Local Similarity 100.0%; Pred. No. 3.8e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 NNFVHDCVNITIKOHTVTTTNGENFTETDVMKMERVVEQ 40
DB 166 NNFVHDCVNITIKOHTVTTTNGENFTETDVMKMERVVEQ 205
RESULT 12
PRIO_ERYPA
ID PRIO_ERYPA STANDARD; PRT; 246 AA.
AC Q95174;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 05-JUL-2004 (Rel. 44, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN Name=PrNP;
OS Erythrocebus patas (Red guenon) (Cercopithecus patas).

```

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Erythrocebus.
 RN NCBI_TaxID=9538;
 RP SEQUENCE FROM N.A.
 RA van der Kuyl A.C., Dekker J.T., Gouda J.;
 RT "Evidence for an increased substitution rate of the hominoid prion
 protein gene during the period of brain expansion."
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PrP is found in high quantity in the brain of humans and
 CC animals infected with the degenerative neurological diseases kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
 CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC or send an email to license@ebi.ac.uk).
 CC -----
 DR EMBL; U75388; AAB50627.1; -;
 DR HSSP; P23907; 1G04.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 FT REPEAT 84 84
 SQ SEQUENCE 246 AA; 26886 MW; D35D105BEC53108 CRC64;
 Query Match 100.0%; Score 211; DB 1; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 40
 Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 205
 RESULT 13
 ID AAO83636 PRELIMINARY; PRT; 246 AA.
 AC AAO83636;
 DT 02-MAR-2004 (TREMBlrel. 27, Created)
 DT 02-MAR-2004 (TREMBlrel. 27, Last sequence update)
 DT 02-MAR-2004 (TREMBlrel. 27, Last annotation update)

DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 RN NCBI_TaxID=9606;
 RP SEQUENCE FROM N.A.
 RA Jeong B.H., Lee Y.J., Lee K.H., Kim Y.S.;
 RT "Polymorphisms of the prion protein gene in Korea."
 RL Submitted (JAN-2003) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY219883; AAO83636.1; -;
 KM Prion.
 FT NON_TER 1 1
 FT NON_TER 246 246
 SQ SEQUENCE 246 AA; 26884 MW; 309B1B13C8841566 CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 246;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 40
 Db 166 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 205
 RESULT 14
 ID O8VHV5 PRELIMINARY; PRT; 248 AA.
 AC O8VHV5;
 DT 01-MAR-2002 (TREMBlrel. 20, Created)
 DT 01-MAR-2002 (TREMBlrel. 20, Last sequence update)
 DT 01-JUN-2003 (TREMBlrel. 24, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=PrP;
 OS Clethrionomys glareolus (Bank vole).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Arvicolinae;
 OC Clethrionomys.
 RN NCBI_TaxID=51090;
 RP SEQUENCE FROM N.A.
 RA Dell'Omo G., Agrimi U., Di Bari M., Mindl O., Vaccari G., Nonno R.,
 RA Di Gardo G., Kretzschmar H.A., Wolfer D.P., Lipp H.P.;
 RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AF367624; AAL57231.1; -;
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KM Prion.
 FT NON_TER 248 248
 FT NON_TER 248 248
 SQ SEQUENCE 248 AA; 27259 MW; 815B64ECD2773C2C CRC64;
 Query Match 100.0%; Score 211; DB 2; Length 248;
 Best Local Similarity 100.0%; Pred. No. 3.8e-19;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 40
 Db 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKMERVEEQ 212
 RESULT 15
 ID P40247; STANDARD; PRT; 252 AA.
 AC P40247;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)

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DT 05-JUN-2004 (Rel. 44, last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Pp33-35C).
GN Name=PRNP;
OS Callithrix jacchus (Common marmoset).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae; Callithrix.
OX NCBI_Taxid=9483;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=9513906; PubMed=787269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: The function of Prp is not known. Prp is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: Prp has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Prp is found in high quantity in the brain of humans and
CC animals infected with the degenerative neurological diseases kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
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CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U08304; AAC50092.1; -.
DR PIR: S53634; S53634.
DR HSSP: P23907; 1G04.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Prion; Repeat; Signal.
FT SIGNAL 1 22
FT CHAIN 23 229
FT PROPEP 230 252
FT LIPID 229 229
FT DISULFID 178 213
FT CARBOHYD 180 180
FT CARBOHYD 196 196
FT DOMAIN 51 90
FT FT 51 58
FT REPEAT 59 66
FT REPEAT 67 74
FT REPEAT 75 82
FT REPEAT 83 90
SQ SEQUENCE 252 AA; 27639 MW; B2800B60F5CE664 CRC64;

Query Match 100.0%; Score 211; DB 1; Length 252;
Best Local Similarity 100.0%; Pred. No. 3.9e-19;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 NNFVHDCVNITIKQHTVTTTIGENFTETDVQMERVVEQ 40
DB 172 NNFVHDCVNITIKQHTVTTTIGENFTETDVQMERVVEQ 211

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218

Perfect score: 211
1 NNFVHDCVNITIKQHTVTTTKGENTFETDVKKMERVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2_6/ptodata/1/1aa/5A.COMB.pep: *
2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep: *
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep: *
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep: *
5: /cgn2_6/ptodata/1/1aa/PTCUTS.COMB.pep: *
6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	142	1 US-08-556-823-10	Sequence 10, Appl
2	211	100.0	245	4 US-09-431-887-5	Sequence 5, Appl
3	211	100.0	245	4 US-09-431-887-15	Sequence 15, Appl
4	211	100.0	252	4 US-09-431-887-13	Sequence 13, Appl
5	211	100.0	252	4 US-09-431-887-17	Sequence 17, Appl
6	211	100.0	253	1 US-08-242-188-2	Sequence 2, Appl
7	211	100.0	253	1 US-08-509-261A-2	Sequence 2, Appl
8	211	100.0	253	1 US-08-660-626-8	Sequence 8, Appl
9	211	100.0	253	1 US-08-692-892-2	Sequence 2, Appl
10	211	100.0	253	2 US-08-713-939A-2	Sequence 2, Appl
11	211	100.0	253	2 US-08-868-162A-22	Sequence 22, Appl
12	211	100.0	253	3 US-09-031-168-8	Sequence 8, Appl
13	211	100.0	253	3 US-09-128-450-20	Sequence 20, Appl
14	211	100.0	253	3 US-09-036-579-2	Sequence 2, Appl
15	211	100.0	253	3 US-09-823-49A-20	Sequence 20, Appl
16	211	100.0	253	3 US-09-550-374-2	Sequence 2, Appl
17	211	100.0	253	4 US-09-431-887-1	Sequence 1, Appl
18	211	100.0	253	4 US-09-431-887-2	Sequence 2, Appl
19	211	100.0	253	4 US-09-431-887-3	Sequence 3, Appl
20	211	100.0	253	4 US-09-431-887-4	Sequence 4, Appl
21	211	100.0	253	4 US-09-431-887-7	Sequence 7, Appl
22	211	100.0	253	4 US-09-431-887-8	Sequence 8, Appl
23	211	100.0	253	4 US-09-431-887-9	Sequence 9, Appl
24	211	100.0	253	4 US-09-431-887-10	Sequence 10, Appl
25	211	100.0	253	4 US-09-431-887-11	Sequence 11, Appl
26	211	100.0	253	4 US-09-431-887-12	Sequence 12, Appl
27	211	100.0	253	4 US-09-431-887-14	Sequence 14, Appl

28	211	100.0	253	4 US-09-431-887-16	Sequence 16, Appl
29	211	100.0	253	4 US-09-431-887-18	Sequence 18, Appl
30	211	100.0	253	4 US-09-431-887-19	Sequence 19, Appl
31	211	100.0	253	4 US-09-943-906-2	Sequence 2, Appl
32	211	100.0	253	4 US-09-669-516C-8	Sequence 8, Appl
33	211	100.0	253	4 US-09-919-172-57	Sequence 57, Appl
34	211	100.0	253	4 US-09-976-594-72	Sequence 72, Appl
35	211	100.0	253	4 US-09-904-987-3	Sequence 3, Appl
36	211	100.0	254	1 US-08-242-188-1	Sequence 1, Appl
37	211	100.0	254	1 US-08-509-261A-1	Sequence 1, Appl
38	211	100.0	254	1 US-08-660-626-7	Sequence 7, Appl
39	211	100.0	254	1 US-08-692-892-1	Sequence 1, Appl
40	211	100.0	254	2 US-08-713-939A-1	Sequence 1, Appl
41	211	100.0	254	2 US-08-868-162A-21	Sequence 21, Appl
42	211	100.0	254	3 US-09-031-168-7	Sequence 7, Appl
43	211	100.0	254	3 US-09-128-450-19	Sequence 19, Appl
44	211	100.0	254	3 US-09-128-450-28	Sequence 28, Appl
45	211	100.0	254	3 US-09-036-579-1	Sequence 1, Appl

ALIGNMENTS

RESULT 1

US-08-556-823-10
Sequence 10, Application US/08556823

Patent No. 5750361
GENERAL INFORMATION:

APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
APPLICANT: Fred E. Cohen

TITLE OF INVENTION: Formation and use of prion protein

NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park
STATE: California
COUNTRY: USA

ZIP: 94025
COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Asciii
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/556, 823
FILING DATE:

CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:

NAME: Valeta Gregg
REFERENCE/DOCKET NUMBER: 35,127
TELECOMMUNICATION INFORMATION:

TELEPHONE: (415) 322-5070
INFORMATION FOR SEQ ID NO: 10:

SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid

TOPOLOGY: linear
MOLECULE TYPE: peptide

US-08-556-823-10

Query Match

Best Local Similarity 100.0%; Score 211; DB 1; Length 142;
Pred. No. 3 2e-22;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 NNFVHDCVNITIKQHTVTTTKGENTFETDVKKMERVEQ 40
DB 84 NNFVHDCVNITIKQHTVTTTKGENTFETDVKKMERVEQ 123

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RESULT 2
US-09-431-887-5
; Sequence 5, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 5
; LENGTH: 245
; TYPE: PRF
; ORGANISM: Cercopithecus aethiops
US-09-431-887-5

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```

Query Match      100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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```

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 40
DB 165 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 204

RESULT 3
US-09-431-887-15
; Sequence 15, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 15
; LENGTH: 245
; TYPE: PRF
; ORGANISM: Cercopithecus diana
US-09-431-887-15

```

```

Query Match      100.0%; Score 211; DB 4; Length 245;
Best Local Similarity 100.0%; Pred. No. 6.2e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 40
DB 165 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 204

RESULT 4
US-09-431-887-13
; Sequence 13, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4

```

```

; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 13
; LENGTH: 252
; TYPE: PRF
; ORGANISM: Callithrix sp.
US-09-431-887-13

```

```

Query Match      100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 40
DB 172 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 211

```

```

RESULT 5
US-09-431-887-17
; Sequence 17, Application US/09431887
; Patent No. 6534036
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
; FILE REFERENCE: ICOT/P21952
; CURRENT APPLICATION NUMBER: US/09/431,887
; CURRENT FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: Patentln Ver. 2.0
; SEQ ID NO 17
; LENGTH: 252
; TYPE: PRF
; ORGANISM: Cebus sp.
US-09-431-887-17

```

```

Query Match      100.0%; Score 211; DB 4; Length 252;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY 1 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 40
DB 172 NNFVHDCVNITIKOHTVTTTGGENFTETDVKMMERVVEQ 211

```

```

RESULT 6
US-08-242-188-2
; Sequence 2, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bosicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentln Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188

```

FILING DATE: 13-MAY-1994
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Bozicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 06510/014001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 854-5277
 TELEFAX: (415) 854-0875
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 ORIGINAL SOURCE:
 ORGANISM: HUMAN PRION PROTEIN, HuPrp
 US-08-242-188-2

Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 |||||||
 DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 7
 US-08-509-261A-2
 Sequence 2, Application US/08509261A
 Patent No. 5763244
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Telling, Glenn
 TITLE OF INVENTION: Method of Detecting Prions
 TITLE OF INVENTION: In a Sample and Transgenic Animal Used for
 NUMBER OF SEQUENCES: 4
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Bozicevic & Reed, LLP
 STREET: 285 Hamilton Avenue, Suite 200
 CITY: Palo Alto
 STATE: CA
 COUNTRY: USA
 ZIP: 94301
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FastSeq for Windows Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/509,261A
 FILING DATE: 31-JUL-1995
 CLASSIFICATION: 800
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER:
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Bozicevic, Karl
 REGISTRATION NUMBER: 28,807
 REFERENCE/DOCKET NUMBER: 6510-030001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 650-327-3400
 TELEFAX: 650-327-3231
 TELEX:
 INFORMATION FOR SEQ ID NO: 2:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear

US-08-509-261A-2

Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 |||||||
 DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 8
 US-08-660-626-8
 Sequence 8, Application US/08660626
 Patent No. 5799655
 GENERAL INFORMATION:
 APPLICANT: Stanley B. Prusiner
 APPLICANT: Glenn C. Telling
 APPLICANT: Fred E. Cohen
 APPLICANT: Michael R. Scott
 TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
 TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
 NUMBER OF SEQUENCES: 13
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Fish & Richardson
 STREET: 2200 Sand Hill Road, Suite 100
 CITY: Menlo Park
 STATE: California
 COUNTRY: USA
 ZIP: 94025
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Ascii
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/660,626
 FILING DATE:
 CLASSIFICATION: 435
 ATTORNEY/AGENT INFORMATION:
 NAME: Valeta Gregg
 REGISTRATION NUMBER: 35,127
 REFERENCE/DOCKET NUMBER: 07532/003001
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 322-5070
 TELEFAX: (415) 854-0875
 INFORMATION FOR SEQ ID NO: 8:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 253 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 ORIGINAL SOURCE:
 ORGANISM: HUMAN PRION PROTEIN, HuPrp
 US-08-660-626-8

Query Match 100.0%; Score 211; DB 1; Length 253;
 Best Local Similarity 100.0%; Pred. No. 6.4e-22;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 40
 |||||||
 DB 173 NNFVHDCVNITIKQHTVTTTGGNFETDVKKMERVVEQ 212

RESULT 9
 US-08-692-892-2
 Sequence 2, Application US/08692892
 Patent No. 5792901
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley B.
 APPLICANT: Scott, Michael R.

APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-692-892-2

Query Match 100.0%; Score 211; DB 1; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGNETETDVMMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGTGNETETDVMMERVVEQ 212

RESULT 10
US-08-713-939A-2
Sequence 2, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fieh & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436

PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELLEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-2

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGTGNETETDVMMERVVEQ 40
Db 173 NNFVHDCVNITIKOHTVTTTGTGNETETDVMMERVVEQ 212

RESULT 11
US-08-868-162A-22
Sequence 22, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELLEX:
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-868-162A-22

Query Match 100.0%; Score 211; DB 2; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 12
US-09-031-168-8
Sequence 8, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPTOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: AsciiII
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valetta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULE TYPE: linear
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-09-031-168-8

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 13
US-09-128-450-20
Sequence 20, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesedro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-128-450-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6,4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 173 NNFVHDCVNITIKQHTVTTTGGNFETEDVKMERVVEQ 212

RESULT 14
US-09-036-579-2
Sequence 2, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williams, R. Anthony
APPLICANT: Butson, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single

TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-2

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETETDVKKMERVVEQ 212

RESULT 15

US-09-823-494-20
Sequence 20, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
TITLE OF INVENTION: Protein
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
US-09-823-494-20

Query Match 100.0%; Score 211; DB 3; Length 253;
Best Local Similarity 100.0%; Pred. No. 6.4e-22;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 NNFVHDCVNITIKQHTVTTTGGNFETETDVKKMERVVEQ 40
DB 173 NNFVHDCVNITIKQHTVTTTGGNFETETDVKKMERVVEQ 212

Search completed: December 3, 2004, 00:18:58
Job time : 15.1475 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-23_COPY_179_218

Perfect score: 211
Sequence: 1 NNFVHDCVNITIKQHTVTITTKGENTFDVKMERVEQ 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	211	100.0	117	14	US-10-050-902-348
2	211	100.0	117	14	US-10-050-898-348
3	211	100.0	117	14	US-10-346-190-89
4	211	100.0	124	14	US-10-050-902-324
5	211	100.0	124	14	US-10-050-898-324
6	211	100.0	124	14	US-10-346-190-93
7	211	100.0	141	16	US-10-612-356A-1
8	211	100.0	162	9	US-09-745-003-10
9	211	100.0	163	14	US-10-104-047-2013
10	211	100.0	164	9	US-09-745-003-12
11	211	100.0	200	16	US-10-470-848-10
12	211	100.0	208	16	US-10-470-848-3
13	211	100.0	208	17	US-10-745-393-1

ALIGNMENTS

14	211	100.0	209	16	US-10-470-848-6	Sequence 6, App1
15	211	100.0	209	16	US-10-470-848-7	Sequence 7, App1
16	211	100.0	225	15	US-10-301-488A-25	Sequence 25, App1
17	211	100.0	225	15	US-10-301-448-25	Sequence 25, App1
18	211	100.0	226	14	US-10-205-194-121	Sequence 121, App
19	211	100.0	245	14	US-10-304-630-5	Sequence 5, App1
20	211	100.0	245	14	US-10-304-630-15	Sequence 15, App1
21	211	100.0	252	14	US-10-304-630-13	Sequence 13, App1
22	211	100.0	252	14	US-10-304-630-17	Sequence 17, App1
23	211	100.0	253	9	US-09-823-494-20	Sequence 20, App1
24	211	100.0	253	9	US-09-904-987-3	Sequence 3, App1
25	211	100.0	253	9	US-09-919-172-57	Sequence 57, App1
26	211	100.0	253	9	US-09-943-906-2	Sequence 2, App1
27	211	100.0	253	14	US-10-304-630-1	Sequence 1, App1
28	211	100.0	253	14	US-10-304-630-2	Sequence 2, App1
29	211	100.0	253	14	US-10-304-630-3	Sequence 3, App1
30	211	100.0	253	14	US-10-304-630-4	Sequence 4, App1
31	211	100.0	253	14	US-10-304-630-7	Sequence 7, App1
32	211	100.0	253	14	US-10-304-630-8	Sequence 8, App1
33	211	100.0	253	14	US-10-304-630-9	Sequence 9, App1
34	211	100.0	253	14	US-10-304-630-10	Sequence 10, App1
35	211	100.0	253	14	US-10-304-630-11	Sequence 11, App1
36	211	100.0	253	14	US-10-304-630-12	Sequence 12, App1
37	211	100.0	253	14	US-10-304-630-14	Sequence 14, App1
38	211	100.0	253	14	US-10-304-630-16	Sequence 16, App1
39	211	100.0	253	14	US-10-304-630-18	Sequence 18, App1
40	211	100.0	253	14	US-10-304-630-19	Sequence 19, App1
41	211	100.0	253	14	US-10-301-488A-21	Sequence 21, App1
42	211	100.0	253	14	US-10-301-488A-22	Sequence 22, App1
43	211	100.0	253	14	US-10-301-488A-32	Sequence 32, App1
44	211	100.0	253	14	US-10-410-907A-8	Sequence 8, App1
45	211	100.0	253	14	US-10-346-190-79	Sequence 79, App1

RESULT 1

US-10-050-902-348 Application US/10050902

Publication No. US20030175290A1

GENERAL INFORMATION:

APPLICANT: Renner, Wolfgang A.

APPLICANT: Tassot, Alain

APPLICANT: Maurel, Patrick

APPLICANT: Lechner, Franziska

APPLICANT: Sebhel, Peter

APPLICANT: Plosek, Christine

TITLE OF INVENTION: Molecular Antigen Array

FILE REFERENCE: 1700.0190004

CURRENT APPLICATION NUMBER: US/10/050.902

CURRENT FILING DATE: 2002-01-18

PRIOR APPLICATION NUMBER: US 60/262,379

PRIOR FILING DATE: 2001-01-19

PRIOR APPLICATION NUMBER: US 60/288,549

PRIOR FILING DATE: 2001-05-04

PRIOR APPLICATION NUMBER: US 60/326,998

PRIOR FILING DATE: 2001-10-05

PRIOR APPLICATION NUMBER: US 60/331,045

PRIOR FILING DATE: 2001-11-07

NUMBER OF SEQ ID NOS: 350

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 348

LENGTH: 117

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE:

OTHER INFORMATION: Modified human prion protein fragment

US-10-050-902-348

Query Match 100.0% ; Score 211 ; DB 14 ; Length 117 ;

Best Local Similarity 100.0% ; Pred. No. 4.9e-21 ;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 52 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 91

RESULT 2

US-10-050-898-348
; Sequence 348, Application US/10050898
; Publication No. US20030175711A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Christl, Christine
; APPLICANT: Ortmann, Rainer
; APPLICANT: Luond, Rainer
; APPLICANT: Steufendiel, Matthias
; APPLICANT: Frey, Peter
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190005
; CURRENT APPLICATION NUMBER: US/10/050,898
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 348
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Modified human prion protein fragment
US-10-050-898-348

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 52 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 91

RESULT 3

US-10-346-190-89
; Sequence 89, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pellicoli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Prion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0290003
; CURRENT APPLICATION NUMBER: US/10/346,190
; PRIOR FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,590
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20

; PRIOR APPLICATION NUMBER: PCT/IB02/00166
; PRIOR FILING DATE: 2002-01-21
; PRIOR APPLICATION NUMBER: 10/050,902
; PRIOR FILING DATE: 2002-01-18
; NUMBER OF SEQ ID NOS: 164
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 89
; LENGTH: 117
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Modified Human Prion Protein Fragment
US-10-346-190-89

Query Match 100.0%; Score 211; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 52 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 91

RESULT 4

US-10-050-902-324
; Sequence 324, Application US/10050902
; Publication No. US20030175290A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin
; APPLICANT: Tissot, Alain
; APPLICANT: Maurer, Patrick
; APPLICANT: Lechner, Franziska
; APPLICANT: Sebbel, Peter
; APPLICANT: Christl, Christine
; TITLE OF INVENTION: Molecular Antigen Array
; FILE REFERENCE: 1700.0190004
; CURRENT APPLICATION NUMBER: US/10/050,902
; PRIOR FILING DATE: 2002-01-18
; PRIOR APPLICATION NUMBER: US 60/262,379
; PRIOR FILING DATE: 2001-01-19
; PRIOR APPLICATION NUMBER: US 60/288,549
; PRIOR FILING DATE: 2001-05-04
; PRIOR APPLICATION NUMBER: US 60/326,998
; PRIOR FILING DATE: 2001-10-05
; PRIOR APPLICATION NUMBER: US 60/331,045
; PRIOR FILING DATE: 2001-11-07
; NUMBER OF SEQ ID NOS: 350
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 324
; LENGTH: 124
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: mPrPc construct
US-10-050-902-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 40
Db 53 NNFFVHDCVNTTIKQHTVTTTGGNFETEDVKMERVVEQ 92

RESULT 5

US-10-050-898-324
; Sequence 324, Application US/10050898
; Publication No. US20030175711A1
; GENERAL INFORMATION:
; APPLICANT: Renner, Wolfgang A.
; APPLICANT: Bachmann, Martin

APPLICANT: Tisot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ottmann, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 324
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Protein sequence of mPrPc
US-10-050-898-324

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 6
US-10-346-190-93
Sequence 93, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pellisoli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Pilon Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20
PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 93
LENGTH: 124
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: mPrPc
US-10-346-190-93

Query Match 100.0%; Score 211; DB 14; Length 124;
Best Local Similarity 100.0%; Pred. No. 5.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 53 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 92

RESULT 7
US-10-612-356A-1
Sequence 1, Application US/10612356A
Publication No. US20040143093A1
GENERAL INFORMATION:
APPLICANT: Zahn, Ralph
APPLICANT: Luhrs, Thorsten
TITLE OF INVENTION: Method for inducing a conformational transition in proteins, such
FILE REFERENCE: PUS-E005-111
CURRENT APPLICATION NUMBER: US/10/612,356A
CURRENT FILING DATE: 2003-07-02
NUMBER OF SEQ ID NOS: 1
SOFTWARE: Patentin version 3.2
SEQ ID NO 1
LENGTH: 141
TYPE: PRT
ORGANISM: Homo sapiens
US-10-612-356A-1

Query Match 100.0%; Score 211; DB 16; Length 141;
Best Local Similarity 100.0%; Pred. No. 6.2e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 84 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 123

RESULT 8
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazar, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PrP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT
ORGANISM: Primate
US-09-745-003-10

Query Match 100.0%; Score 211; DB 9; Length 162;
Best Local Similarity 100.0%; Pred. No. 7.3e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 40
Db 82 NNFVHDCVNITIKOHTVTTTGGNFETDVKMERVVEQ 121

RESULT 9
US-10-104-047-2013
Sequence 2013, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1 full length cDNA
FILE REFERENCE: HI-A0105

;; CURRENT APPLICATION NUMBER: US/10/104,047
;; CURRENT FILING DATE: 2002-03-25
;; PRIOR APPLICATION NUMBER:
;; PRIOR FILING DATE:
;; NUMBER OF SEQ ID NOS: 4096
;; SOFTWARE: Patent In Ver. 2.1
;; SEQ ID NO 2013
;; LENGTH: 163
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-104-047-2013

Query Match 100.0%; Score 211; DB 14; Length 163;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 40
Db 83 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 122

RESULT 10
US-09-745-003-12
; Sequence 12, Application US/09745003
; Patent No. US20020042122A1
; GENERAL INFORMATION:
; APPLICANT: Bazar, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PPT2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 12
; LENGTH: 164
; TYPE: PRT
; ORGANISM: rodent
US-09-745-003-12

Query Match 100.0%; Score 211; DB 9; Length 164;
Best Local Similarity 100.0%; Pred. No. 7,4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 40
Db 82 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 121

RESULT 11
US-10-470-848-10
; Sequence 10, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 10
; LENGTH: 200
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-10

Query Match 100.0%; Score 211; DB 16; Length 200;
Best Local Similarity 100.0%; Pred. No. 9,5e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 40

Db 143 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 182

RESULT 12
US-10-470-848-3
; Sequence 3, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470,848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patent In Ver. 2.0
; SEQ ID NO 3
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-470-848-3

Query Match 100.0%; Score 211; DB 16; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 190

RESULT 13
US-10-745-393-1
; Sequence 1, Application US/10745393
; Publication No. US20040203131A1
; GENERAL INFORMATION:
; APPLICANT: Faatz, Elke
; APPLICANT: Scholz, Christian
; APPLICANT: Stock, Werner
; APPLICANT: Schaarschmidt, Peter
; TITLE OF INVENTION: Complexes comprising a prion protein and peptidyl prolyl isomerase
; FILE REFERENCE: 12290 US3 (9793/141)
; CURRENT APPLICATION NUMBER: US/10/745,393
; CURRENT FILING DATE: 2003-12-23
; PRIOR APPLICATION NUMBER: EP 0115225.3
; PRIOR FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: EP 01120939.2
; PRIOR FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 10/167,774
; PRIOR FILING DATE: 2002-06-10
; PRIOR APPLICATION NUMBER: US 10/179,905
; PRIOR FILING DATE: 2002-06-24
; NUMBER OF SEQ ID NOS: 3
; SOFTWARE: Patent In Ver. 3.1
; SEQ ID NO 1
; LENGTH: 208
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-745-393-1

Query Match 100.0%; Score 211; DB 17; Length 208;
Best Local Similarity 100.0%; Pred. No. 9,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 40
Db 151 NNFVHDCVNITIKOHTVTTTGGNFETEDVMMERVVEQ 190

RESULT 14

```
US-10-470-848-6
; Sequence 6, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470, 848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 6
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; OTHER INFORMATION: Description of Artificial Sequence:ChM-type prion protein
US-10-470-848-6

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1  NNPFVHDCVNITIKQHTVTTTGGENFTETDVKKMERVVEQ 40
      |||
Db      151 NNPFVHDCVNITIKQHTVTTTGGENFTETDVKKMERVVEQ 190

RESULT 15
US-10-470-848-7
; Sequence 7, Application US/10470848
; Publication No. US20040137421A1
; GENERAL INFORMATION:
; APPLICANT: President of Tohoku University
; TITLE OF INVENTION: Method of Screening for Infection Factor of Prion Disease
; FILE REFERENCE: PH-1224-PCT
; CURRENT APPLICATION NUMBER: US/10/470, 848
; CURRENT FILING DATE: 2003-07-31
; PRIOR APPLICATION NUMBER: JP 2001-24279
; PRIOR FILING DATE: 2001-01-31
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 7
; LENGTH: 209
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:Chv type prion protein
US-10-470-848-7

Query Match          100.0%; Score 211; DB 16; Length 209;
Best Local Similarity 100.0%; Pred. No. 1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY      1  NNPFVHDCVNITIKQHTVTTTGGENFTETDVKKMERVVEQ 40
      |||
Db      151 NNPFVHDCVNITIKQHTVTTTGGENFTETDVKKMERVVEQ 190

Search completed: December 3, 2004, 01:07:47
Job time : 47.3443 secs
```

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 76.1639 Seconds
(without alignments)
216.658 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221

Perfect score: 250
Sequence: 1 VYRRPYDQYSNONNFVHDCV.....HYTTTGTGKFNPTEDIKKM 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database: A_Geneseq_23Sep04:*

1: geneseqp1960s:.*
2: geneseqp1990s:.*
3: geneseqp2000s:.*
4: geneseqp2001s:.*
5: geneseqp2002s:.*
6: geneseqp2003as:.*
7: geneseqp2003bs:.*
8: geneseqp2004s:.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	250	100.0	117	5	ABG94358 Modified
2	250	100.0	117	5	ABG80670 Bovine pr
3	250	100.0	117	7	ADD24197 Modified
4	250	100.0	217	3	AAB07317 Cattle pr
5	250	100.0	217	3	AAB07328 Cattle pr
6	250	100.0	219	2	AAW70261 Bovine pr
7	250	100.0	219	2	AAW93571 Bovine pr
8	250	100.0	256	6	ABP57900 Bovine BS
9	250	100.0	263	2	AAW86716 Bovine pr
10	250	100.0	263	2	AAW86961 Bovine pr
11	250	100.0	263	2	AAW85902 Bovine pr
12	250	100.0	263	4	AAW85854 Bovine pr
13	250	100.0	263	5	ABP51788 Bovine pr
14	250	100.0	263	6	ABU58869 Bovine pr
15	250	100.0	263	6	AAE33228 Bovine pr
16	250	100.0	263	8	ADK15534 Bovine pr
17	250	100.0	264	2	AAW07995 Bovine pr
18	250	100.0	264	4	AAW86176 Bovine pr
19	250	100.0	264	4	AAW82113 Bovine pr
20	250	100.0	264	5	ABW04424 Bovine pr
21	250	100.0	264	5	AAE15604 Bovine pr
22	250	100.0	264	6	ABU07876 Bovine pr
23	250	100.0	264	6	AAE36754 Cow prion
24	250	100.0	264	6	ABP55139 Bovine pr
25	250	100.0	264	6	ABR42798 Bovine pr

26	250	100.0	264	6	ABR42801 Cattle pr
27	250	100.0	264	7	ADD24187 Bovine pr
28	250	100.0	264	7	ADW86886 Bovine w1
29	250	100.0	264	7	ADW06743 Bovine pr
30	250	100.0	264	8	ADH44555 Bovine pr
31	250	100.0	264	8	ADK15535 Bovine pr
32	250	100.0	264	8	ADK155208 Bovine pr
33	250	100.0	265	5	AAW50889 Bovine pr
34	249	99.6	264	4	AAW72361 Cow prion
35	247	98.8	264	4	AAW72364 Kudu prion
36	246	98.4	264	7	ADW86899 Bovine mu
37	245	98.0	124	5	ABG94340 Mouse mPr
38	245	98.0	124	5	ABG80652 Mouse trv
39	245	98.0	128	3	ADD24200 mPrPC-EK-
40	245	98.0	208	3	AAW07316 Mouse pr1
41	245	98.0	208	3	AAW07327 Mouse pr1
42	245	98.0	208	7	ADJ66133 Mouse pr1
43	245	98.0	211	4	AAW30801 Amino ac1
44	245	98.0	225	6	ABR42793 Rat prion
45	245	98.0	226	7	ABW85240 Rat prion

ALIGNMENTS

RESULT 1
ABG94358
ID ABG94358 standard; protein, 117 AA.

XX ABG94358;
AC
XX
XX
DT 06-AUG-2003 (revised)
DT 10-DEC-2002 (first entry)

DE Modified bovine prion protein fragment.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW Cytostatic; antiviral; antidiabetic; hypoglycaemic; antigen array;
KW vaccine; infectious disease.

XX Bos taurus.

OS W0200256905-A2.

XX 21-JAN-2002; 2002MO-IB000166.

XX 19-JAN-2001; 2001US-0262379P.

XX 04-MAY-2001; 2001US-0288549P.

XX 05-OCT-2001; 2001US-0326998P.

XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Renner WA, Bachmann M, Tissot A, Maurer P, Lechner F, Sebbel P;
PI Ploesek C;

XX WPI; 2002-627351/67.

DR Molecular antigen array used in the production of vaccines for infectious
XX diseases.
PS Disclosure; Page 441; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array
used in the production of vaccines for infectious diseases. The invention
also discloses a composition comprising a non-natural molecular scaffold
comprising a core particle selected from a core particle of a non-natural
origin and a core particle of natural origin and an organiser comprising
at least one first attachment site, where the organiser is connected to
the core particle by at least one covalent bond. Also disclosed is an
antigen or antigenic determinant with at least one second attachment

CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antiallergic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention. (Updated on 06
 CC -Aug-2003 to correct OS field.)
 CC XX

SQ Sequence 117 AA;

Query Match 100.0%; Score 250; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 8e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 VYRRPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKKM 46
 |||||
 Db 40 VYRRPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKKM 85

RESULT 2
 ABG80670
 ID ABG80670 standard; protein; 117 AA.

AC ABG80670;

DT 29-NOV-2002 (first entry)

DE Bovine prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 KM molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutan;
 KM graft versus host disease; Igg-mediated allergic reaction; anaphylaxis;
 KM adult respiratory distress syndrome; ARDS; Crohn's disease;
 KM allergic asthma; acute lymphoblastic leukemia; non-Hodgkin's lymphoma;
 KM Grave's disease; systemic lupus erythematosus; osteoporosis;
 KM inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 KM immunoproliferative disease lymphadenopathy; Alzheimer's disease;
 KM angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 KM rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 KM enterokinase; cysteine-containing linker.
 KM XX

OS Bos taurus.
 OS Synthetic.

PN WO200256907-A2.

PD 25-JUL-2002.

PF 21-JAN-2002; 2002MO-IB000168.

PR 19-JAN-2001; 2001US-0262379P.
 PR 04-MAY-2001; 2001US-0288549P.
 PR 05-OCT-2001; 2001US-0326998P.
 PR 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

PA (MAUR/) NOVARTIS PHARMA AG.

PA (LECH/) LECHNER F.

PA (ORTM/) ORTMANN R.

PA (LUBO/) LUBOWEND R.

PA (STAU/) STAUFENBIEL M.

PA (FREY/) FREY P.

XX Maurer P, Lechner F, Ortman R, Luegend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tisoc A, Gebel P, Piossek C;
 DR WPI; 2002-636514/68.

PI Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PR

PS Disclosure: Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser comprising at least one first attachment
 CC site, where the organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, Igg-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)
 CC XX

SQ Sequence 117 AA;

Query Match 100.0%; Score 250; DB 5; Length 117;
 Best Local Similarity 100.0%; Pred. No. 8e-24;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Oy 1 VYRRPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKKM 46
 |||||
 Db 40 VYRRPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFTETDIKKM 85

RESULT 3

ID ADD24197 standard; protein; 117 AA.

AC ADD24197;

DT 15-JAN-2004 (first entry)

DE Modified bovine prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;
 KM first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP, PrP peptide; vaccine; neuroprotective; antiinflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion.

XX Synthetic.

OS prion.

PN

PD

PF

PR

XX

```

PN MO2003059386-A2.
XX
XX 24-JUL-2003.
XX
XX 17-JAN-2003; 2003MO-EP000460.
XX
XX 18-JAN-2002; 2002US-00050902.
PR 21-JAN-2002; 2002MO-1B000166.
PR 08-JUL-2002; 2002US-0393725P.
PR 18-JUL-2002; 2002US-0396590P.
XX
XX (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX Bachmann M, Maurer P, Pelliccioli E, Renner WA;
XX WPI; 2003-598483/56.
XX
XX A vaccine composition for preventing or treating prion diseases (e.g.
XX Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
XX phase) and at least one prion protein or peptide bound to the virus-like
XX particle.
XX
XX Disclosure; SEQ ID NO 90; 246pp; English.
XX
XX This invention relates to a novel vaccine composition comprising a virus-
XX like or a core particle with at least one first attachment site and at
XX least one antigen or antigenic determinant that is a prion protein (PrP)
XX or its dimer, or a PrP peptide, the antigen or antigenic determinant
XX being bound to the virus-like or core particle. The vaccine of the
XX invention may have neuroprotective or antiinflammatory activity. The
XX composition is useful as a medicament or in manufacturing a medicament
XX for the treatment or prevention of prion diseases. The prion diseases may
XX include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
XX Disease. The present sequence is the amino acid sequence of a modified
XX bovine prion protein (PrP) which may be used during the creation of the
XX vaccine composition of the invention.
XX
XX Sequence 117 AA;
SQ
Query Match 100.0%; Score 250; DB 7; Length 117;
Best Local Similarity 100.0%; Pred. No. 8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 VYVRPVDQYNSQNNFVHDCVNIIVKEHTVTTTNGENFTETDIXM 46
Db 40 VYVRPVDQYNSQNNFVHDCVNIIVKEHTVTTTNGENFTETDIXM 85
XX
XX RESULT 4
XX AAB07317
XX ID AAB07317 standard; protein; 217 AA.
XX
XX AAB07317;
XX
XX 12-SEP-2003 (revised)
XX 17-OCT-2000 (first entry)
XX
XX Cattle prion protein sequence.
XX
XX Cattle; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX Bos taurus.
XX
XX Key Location/Qualifiers
XX Region 37..79
XX /note= "Repeat region consisting of tandem repeats of
XX repeat unit: PHGGGWGQ (AAB07319)"
XX Disulfide-bond 166..201
XX Modified-site 217
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX

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PN MO200029850-A1.
XX
XX 25-MAY-2000.
XX
XX 27-OCT-1999; 99MO-FI000897.
XX
XX 17-NOV-1998; 98FI-00002481.
XX
XX (WALL-) WALLAC OY.
XX (BBSR-) BBSRC OFFICE.
XX
XX Hope J, Barnard GJR, Birkett CR;
XX WPI; 2000-387880/33.
XX
XX Novel immunoassay for prion protein, used for the determination of
XX transmissible spongiform encephalopathies in bovines.
XX
XX Disclosure; Page 42-43; 50pp; English.
XX
XX The present sequence is the cattle prion protein (PrP) sequence.
XX Conversion of the normal cellular form of PrP into an aggregated,
XX insoluble isoform is implicated in the pathogenesis of Transmissible
XX Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
XX and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
XX this protein in body fluid or tissue samples may be measured by an assay
XX of the present invention, in which a PrP epitope is captured by an
XX antibody, which is then detected. The presence of PrP indicates BSE. PrP
XX epitopes (AAB07320-B07326) are derived from the protease resistant core
XX of PrP that is occluded when the PrP is in an aggregated state. (Updated
XX on 12-SEP-2003 to standardise OS field)
XX
XX Sequence 217 AA;
SQ
Query Match 100.0%; Score 250; DB 3; Length 217;
Best Local Similarity 100.0%; Pred. No. 1.7e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 VYVRPVDQYNSQNNFVHDCVNIIVKEHTVTTTNGENFTETDIXM 46
Db 148 VYVRPVDQYNSQNNFVHDCVNIIVKEHTVTTTNGENFTETDIXM 193
XX
XX RESULT 5
XX AAB07328
XX ID AAB07328 standard; protein; 217 AA.
XX
XX AAB07328;
XX
XX 12-SEP-2003 (revised)
XX 17-OCT-2000 (first entry)
XX
XX Cattle prion protein sequence.
XX
XX Cattle; prion protein; transmissible spongiform encephalopathy;
XX bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX
XX Bos taurus.
XX
XX Key Location/Qualifiers
XX Region 37..79
XX /note= "Repeat region consisting of tandem repeats of
XX repeat unit: PHGGGWGQ (AAB07319)"
XX Disulfide-bond 166..201
XX Modified-site 217
XX /note= "C-terminal phospho-inositol glycolipid membrane
XX anchor (-GPI)"
XX
XX MO200029849-A1.
XX 25-MAY-2000.
XX

```

PF 27-OCT-1999; 99MO-F1000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 DR WPI, 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an assay
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAH07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 217 AA;
 XX
 Query Match 100.0%; Score 250; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 1.7e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
 Db 148 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 193
 XX
 RESULT 6
 AAW70261
 ID AAW70261 standard; protein; 219 AA.
 XX
 AC AAW70261;
 XX
 DT 13-NOV-1998 (first entry)
 XX
 DE Bovine prion protein.
 XX
 KW Prion protein; PrP; cow; disease-specific prion protein; scrapie; Kuru;
 KW prion disease detection; bovine spongiform encephalopathy; therapy;
 KW Creutzfeldt-Jacob disease; Gerstmann-Strausler-Scheinker syndrome;
 KW Fatal Familial Insomnia.
 XX
 OS Bos taurus.
 XX
 PN EP861900-A1.
 XX
 PD 02-SEP-1998.
 XX
 PF 21-FEB-1997; 97EP-00102837.
 XX
 PR 21-FEB-1997; 97EP-00102837.
 XX
 PA (ERZI-) ERZIEHUNGSDIREKTION CANTON ZURICH.
 XX
 PI Korth C, Stierli B, Moser M, Streiff P, Oesch B;
 XX
 DR WPI, 1998-449112/39.
 DR N-PEDB; AAV33005.
 XX

PT New monoclonal antibodies specifically bind to disease-specific prion
 PT proteins - used to diagnose, prevent and treat prion diseases e.g.
 PT bovine spongiform encephalopathy, scrapie and Creutzfeldt-Jacob disease.
 XX
 PS Disclosure; Page 20-21; 35pp; English.
 XX
 CC This sequence represents the bovine prion protein (PrP). The protein is
 CC targeted by the antibody of the invention, which is a monoclonal antibody
 CC or fragment capable of specifically binding to native and denatured
 CC normal (PrPc) and disease-specific prion protein (PrPsc) in an antigen-
 CC antibody complex. The antibodies that immunoreact with disease-specific
 CC prion proteins are used in test kits for the diagnosis of prion diseases
 CC and to detect disease-specific PrP in biological material by treatment of
 CC a probe of the material with proteinase K and then with the monoclonal
 CC antibody. The monoclonal antibodies are used for the prevention and
 CC treatment of prion diseases and to clear biological material from prions.
 CC The antibodies are used to diagnose, treat and prevent e.g. bovine
 CC spongiform encephalopathy, scrapie in sheep and Creutzfeldt-Jacob
 CC disease, Gerstmann-Strausler-Scheinker syndrome, Fatal Familial Insomnia
 CC and Kuru in humans. The diagnostic method allows mass screening of
 CC infected cattle tissue at a subclinical stage and reduces possible human
 CC health risks
 XX
 SQ Sequence 219 AA;
 XX
 Query Match 100.0%; Score 250; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 1.7e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 XX
 QY 1 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
 Db 149 VYRPPVQYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 194
 XX
 RESULT 7
 AAW93571
 ID AAW93571 standard; protein; 219 AA.
 XX
 AC AAW93571;
 XX
 DT 17-JUN-1999 (first entry)
 XX
 DE Bovine rPrP protein.
 XX
 KW Prion protein; PrP; rPrP; disease specific isoform; PrP(Sc); vaccine;
 KW treatment; diagnosis; Scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;
 KW detection.
 XX
 OS Bos taurus.
 XX
 PN DE19741607-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 20-SEP-1997; 97DE-01041607.
 XX
 PR 20-SEP-1997; 97DE-01041607.
 XX
 PA (PRIO-) PRIONICS AG.
 XX
 PI Moser M, Oesch B, Korth C;
 XX
 DR WPI, 1999-205964/18.
 XX
 PT New polypeptides comprising prion protein sequences - useful for
 PT diagnosis or treatment of prion diseases e.g. Scrapie, BSE and
 PT Creutzfeldt-Jacob disease.
 XX
 PS Claim 13; Page 6-7; 12pp; German.
 XX
 CC This invention describes a synthetic polypeptide comprising at least one
 CC "defined" PrP (prion protein) sequence or sequences derived therefrom
 CC that are recognised by a disease specific isoform of PrP, e.g. PrP(Sc),

CC binding substances. The new prion protein polypeptides are useful in
 CC vaccines and pharmaceuticals for treatment of, and as diagnostic agents
 CC for diagnosis of scrapie, BSE, Kuru and Creutzfeldt-Jacob disease. The
 CC polypeptides are also useful in pharmaceutical or chemical libraries for
 CC detection of PrP(Sc)-specific agents

XX
 SQ Sequence 219 AA;

Query Match 100.0%; Score 250; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 1.7e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETD1KMM 46
 DB 149 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETD1KMM 194

RESULT 8
 ABP57900
 ID ABP57900 standard; protein; 256 AA.
 XX
 AC ABP57900;

DT 12-FEB-2003 (first entry)

DE Bovine BSE-resistant prion protein.

XX Transmissible spongiform encephalopathy; neuroprotective; prion protein;
 KM bovine spongiform encephalopathy; transgenic; BSE; bovine; cervid; PrP;
 KM TSE.

XX Bos taurus.

XX MO200279416-A2.

PD 10-OCT-2002.

PF 28-MAR-2002; 2002MO-US009652.

PR 30-MAR-2001; 2001US-0280549P.

PA (TEXA) UNIV TEXAS A & M SYSTEM.

PI Dunne PW, Piedrahita J;

XX WPI; 2003-0932895/08.

DR N-PSDB; ABV93701.

XX New transgenic bovine and cervid useful for producing animals which are
 PT resistant to bovine spongiform encephalopathy and transmissible
 PT spongiform encephalopathy disease, comprise a transgene encoding a mutant
 PT PrP polypeptide.

PS Claim 1; Fig 6; 98pp; English.

XX The invention relates to a novel transgenic bovine/cervid comprising a
 CC transgene encoding a mutant prion protein (PrP) polypeptide, in which a
 CC substitution has been made at position 171 of the sequence, which renders
 CC the bovine/cervid resistant to bovine spongiform encephalopathy (BSE) and
 CC transmissible spongiform encephalopathy (TSE) disease, respectively. The
 CC transgene of the invention has neuroprotective activity. The method is
 CC useful for producing a transgenic bovine or cervid resistant to BSE and
 CC TSE diseases. The bovine prion gene is useful for producing transgenic
 CC cattle exhibiting resistance to bovine spongiform encephalopathy. The
 CC sequence represents the mutant bovine PrP polypeptide

XX Sequence 256 AA;

Query Match 100.0%; Score 250; DB 6; Length 256;
 Best Local Similarity 100.0%; Pred. No. 2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETD1KMM 46

DB 164 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETD1KMM 209

RESULT 9
 AAR86716
 ID AAR86716 standard; protein; 263 AA.
 XX
 AC AAR86716;

DT 15-OCT-1996 (first entry)

DE Bovine prion protein, BoPrP.

XX Chimeric gene; chimeric prion; transgenic animal; diagnosis;
 KM spongiform encephalopathy; PrP; central nervous system; CNS;
 KM Creutzfeldt-Jacob disease; CJD; BSE.

XX Bos taurus.

XX WO9531466-A1.

PD 23-NOV-1995.

PF 10-APR-1995; 95MO-US004426.

PR 13-MAY-1994; 94US-00242188.

PA (REGC) UNIV CALIFORNIA.

PI Prusiner SB, Scott MR, Telling G;

XX WPI; 1996-010868/01.

XX Chimeric prion protein gene - for formation of a transgenic animal
 PT susceptible to prion infection by prion(s) normally specific for a
 PT different species.

PS Disclosure; Page 42-43; 65pp; English.

XX Pathogenic prions in a sample can be detected by injecting the sample to
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric
 CC PrP gene in which the gene includes a portion of a gene of the animal
 CC (e.g. cattle) in danger of infection from prions in the sample. Preferred
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment
 CC of the mouse PrP, MoPrP, is replaced with the corresponding bovine PrP
 CC sequence

XX Sequence 263 AA;

Query Match 100.0%; Score 250; DB 2; Length 263;
 Best Local Similarity 100.0%; Pred. No. 2.1e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETD1KMM 46
 DB 171 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETD1KMM 216

RESULT 10
 AAM69661
 ID AAM69661 standard; protein; 263 AA.
 XX
 AC AAM69661;

XX 25-MAR-2003 (revised)

DT 19-OCT-1998 (first entry)

DE Bovine prion protein BoPrP.

XX Bovine; cow; prion protein; PrP; transgenic animal; artificial gene;
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

XX

```

OS Bos sp.
XX
XX US5792901-A.
XX
XX 11-AUG-1998.
XX
XX 30-JUL-1996; 96US-00692892.
XX
XX 13-MAY-1994; 94US-00242188.
XX 31-JUL-1995; 95US-00509261.
XX 31-AUG-1995; 95US-00521992.
XX
XX (REGC ) UNIV CALIFORNIA.
XX
XX Scott MR, Telling GC, Prusiner SB;
XX
XX WPI, 1998-456207/39.
XX
XX Transgenic mouse with altered PrP gene - for detecting disease-causing
XX prions.
XX
XX Example 8; Fig 4; 37pp; English.
XX
XX A transgenic mouse has been developed which comprises a genome in which
XX both alleles of an endogenous PrP (prion protein) gene of the mouse are
XX ablated, the genome containing operatively inserted all exogenous non-
XX mouse PrP gene. The mouse is susceptible to infection with prions which
XX generally only infect a genetically diverse mammal due to the presence of
XX the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
XX symptoms of prion disease within 200 days or less after inoculation with
XX prions which generally only infect a genetically diverse mammal. Also
XX described in the present invention are: (A) a method of producing the
XX transgenic mouse; and (B) determining the presence of infectious prions
XX in a sample obtained from a bovine. The transgenic mouse is used to
XX detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
XX disease of humans caused by prions. The present sequence represents
XX bovine prion protein (BovPrP), from the present invention. (Updated on 25-
XX MAR-2003 to correct PF field.)
XX
XX SQ Sequence 263 AA;
XX
XX Query Match 100.0%; Score 250; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 2.1e-23;
XX Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 VYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDIDKMW 46
XX |||||
XX 171 VYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDIDKMW 216
XX
XX RESULT 11
XX ID AAW65902 standard; peptide; 263 AA.
XX
XX AC AAW65902;
XX
XX 12-FEB-1999 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
XX Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
XX cosmetic; therapeutic; bovine.
XX
XX Bos sp.
XX
XX US5846533-A.
XX
XX 08-DEC-1998.
XX
XX 13-SEP-1996; 96US-00713939.
XX
XX 14-SEP-1995; 95US-00528104.
XX

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XX
XX (REGC ) UNIV CALIFORNIA.
XX PA (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI, 1999-058996/05.
XX
XX Antibody specific for scrapie isoform of prion protein - useful for
XX diagnosis and therapy.
XX
XX Disclosure; Col 43-44; 58pp; English.
XX
XX This represents a bovine prion protein (PrP) sequence. The invention
XX relates to an antibody that is capable of binding to native PrP(Sc), the
XX scrapie isoform of PrP. The antibody is produced by a method that
XX comprises synthesizing a library of antibodies on phages, contacting the
XX phages with a composition containing PrP proteins, isolating phages that
XX bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
XX and optionally analysing the phages to determine a nucleic acid sequence
XX encoding an amino acid sequence to which the native PrP(Sc) binds. The
XX antibody is used to detect disease-associated PrP, especially in
XX Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
XX can also be used to neutralise the infectivity of PrP(Sc). Assays using
XX the antibodies can be used to screen for disease-associated PrP in
XX pharmaceutical products, foods and cosmetics or for therapeutic purposes
XX
XX SQ Sequence 263 AA;
XX
XX Query Match 100.0%; Score 250; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 2.1e-23;
XX Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX QY 1 VYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDIDKMW 46
XX |||||
XX 171 VYRPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDIDKMW 216
XX
XX RESULT 12
XX ID AAG65854 standard; protein; 263 AA.
XX
XX AC AAG65854;
XX
XX 11-FEB-2002 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; prion protein; Creutzfeldt-Jakob disease; familial insomni; PrP-Sc;
XX scrapie; Gerstmann-Strassler-Scheinker disease.
XX
XX Bos sp.
XX
XX US6290954-B1.
XX
XX 18-SEP-2001.
XX
XX 06-MAR-1998; 98US-00036579.
XX
XX 14-SEP-1995; 95US-00528104.
XX 13-SEP-1996; 96US-00713939.
XX
XX (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI; 2001-637939/73.
XX
XX Detecting a scrapie isoform of the prion protein (PrP-Sc) in a source,
XX particularly useful for detecting e.g. Creutzfeldt-Jakob disease or
XX Gerstmann-Strassler-Scheinker disease, by contacting the source with PrP-
XX Sc antibodies.
XX

```

PS Disclosure; Fig 3; 58pp; English.

XX The invention provides a method for detecting a scrapie isoform of the

CC prion protein (PrP-Sc) in a source. The method involves contacting the

CC source suspected of containing native PrP-Sc with a diagnostic amount of

CC an antibody characterized by its ability to bind to native PrP-Sc in

CC situ. The method is useful for detecting PrP-Sc in a source, which is

CC particularly useful for detecting Creutzfeldt-Jakob disease, fatal

CC familial insomnia or Gerstmann-Strassler-Scheinker disease. The present

CC sequence represents the bovine PrP sequence

XX

SQ Sequence 263 AA;

Query Match 100.0%; Score 250; DB 4; Length 263;

Best Local Similarity 100.0%; Pred. No. 2.1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRRPVQYNSQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 46

171 VYRRPVQYNSQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 216

Db

RESULT 13

ABP51788

ID ABP51788 standard; protein; 263 AA.

XX

AC ABP51788;

XX

DT 03-OCT-2002 (first entry)

XX

DE Bovine prion protein (PrP) SEQ ID NO:3.

XX

KM Prion protein; PrP; scrapie; PrPSc; prion disease; immunosassay;

KM detection.

XX

OS Bos sp.

XX

PN US6372214-B1.

XX

PD 16-APR-2002.

XX

PF 13-APR-2000; 2000US-00550374.

XX

PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713939.

PR 06-MAR-1998; 98US-00036579.

XX

PA (REGC) UNIV CALIFORNIA.

PA (SCRI) SCRIPPS RES INST.

XX

PI Prusiner SB, Williamson RA, Burton DR;

XX

PI WPI; 2002-433675/46.

DR

XX

PT Immunosassays for detecting scrapie isoforms of prion protein (PrPSc) and

PT for purifying PrPSc from samples, useful e.g. in diagnosing PrPSc disease

PT and testing pharmaceuticals for contamination.

XX

PS Disclosure; Fig 3; 58pp; English.

XX

XX The present invention describes methods for detecting scrapie isoforms of

CC prion protein (PrPSc) infection in dead animals, purifying materials

CC suspected of containing PrPSc proteins and treating materials, using

CC antibodies specific for PrPSc. Also described: (1) method of determining

CC PrPSc infection in a dead animal, comprising: (a) extracting tissue from

CC an animal that has died; (b) contacting the tissue with an antibody

CC characterised by its ability to bind to native PrPSc in situ (the

CC antibody binds to a form of PrPSc specific to the animal that has died);

CC and (c) determining if the antibody has bound to PrPSc (the presence of

CC PrPSc in the tissue is indicative of PrPSc infection); (2) a method of

CC purifying a material suspected of containing a PrPSc protein, comprising:

CC (a) contacting the material with an antibody (characterized by its

CC ability to bind native PrPSc in situ) which is bound to a support surface

CC ; and (b) removing material not bound to the antibody; (3) a method of

CC treating a material, comprising applying (to the material) an antibody

CC that binds native PrPSc in situ. The methods are used for diagnosing and

CC detecting prion disease (scrapie) in dead animal tissue (i.e.

CC immunosassays), for separating PrPSc proteins from biological samples

CC (i.e. immunopurification) and for treating materials. The present

CC sequence represents the bovine prion protein (PrP) which is given in the

CC exemplification of the present invention

XX

SQ Sequence 263 AA;

Query Match 100.0%; Score 250; DB 5; Length 263;

Best Local Similarity 100.0%; Pred. No. 2.1e-23;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRRPVQYNSQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 46

171 VYRRPVQYNSQNNFVHDCVNITVKEHTVTTTGGNFETDIKMM 216

Db

RESULT 14

ABU58869

ID ABU58869 standard; protein; 263 AA.

XX

AC ABU58869;

XX

DT 15-APR-2003 (first entry)

XX

DE Bovine prion protein (PrP).

XX

KM Prion protein; native prion protein; PrPSc; phage display library;

KM pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody;

KW scrapie; bovine spongiform encephalopathy; BSE; mad cow disease;

KW feline spongiform encephalopathy.

XX

OS Bos sp.

XX

PN US2002150571-A1.

XX

PD 17-OCT-2002.

XX

PF 30-AUG-2001; 2001US-00943906.

XX

PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713939.

PR 06-MAR-1998; 98US-00036579.

PR 13-APR-2000; 2000US-00550374.

XX

PA (PRUS/) PRUSINER S B.

PA (WILL/) WILLIAMSON R A.

PA (BURT/) BURTON D R.

XX

PI Prusiner SB, Williamson RA, Burton DR;

XX

PI WPI; 2003-198264/19.

DR

XX

PT Novel antibody that has the ability to specifically bind to native prion

PT protein PrPSc in situ, useful for detecting human PrPSc in a source, for

PT determining the cause of death of an animal, or in therapy.

XX

PS Disclosure; Fig 3; 36pp; English.

XX

XX The invention describes an antibody (I) that has the ability to

CC specifically bind to native prion protein PrPSc in situ, where (I) is

CC produced by synthesising a library of antibodies on phage, panning the

CC library against a sample by bringing the phage into contact with a

CC composition comprising PrP proteins, and isolating phage which bind PrPSc

CC protein. (I) is useful for: detecting human PrPSc in a source; for

CC determining the cause of death of an animal (e.g. scrapie, bovine

CC spongiform encephalopathy (BSE) or mad cow disease and feline spongiform

CC encephalopathy); for purifying a material suspected of containing PrPSc

CC protein, by contacting the material with a sufficient amount of (I) which

CC is bound to a support surface and removing material not bound to (I); for

CC treating a material by adding to the material a sufficient amount of (1)
 CC to neutralise PrPSc protein infectivity; in an assay to screen for the
 CC presence of prions (1.e. PrPSc) in products such as pharmaceuticals, food
 CC or cosmetics, in prion neutralisation to purify a product, in extraction
 CC of prion proteins, and in therapy. (1) provides a fast, efficient and
 CC cost effective assay for detecting the presence of PrPSc in a sample, and
 CC binds to a relatively high percentage of the infectious form of PrPSc.
 CC This is the amino acid sequence of a prion protein used in the creation
 CC of an anti-prion protein-antibody

XX Sequence 263 AA;

Query Match 100.0%; Score 250; DB 6; Length 263;
 Best Local Similarity 100.0%; Pred. No. 2.1e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 46
 DB 171 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 216

RESULT 15

AAE33228 AAE33228 standard; protein; 263 AA.

XX AAE33228;

XX 02-MAY-2003 (first entry)

DE Bovine PrP protein.

XX Bovine; pathogenic; prion protein; PrPSc; Creutzfeldt-Jakob disease;

KM kuru; vaccine; neuroprotective; immunostimulant.

XX Bos sp.

OS WO200287502-A2.

XX 07-NOV-2002.

XX 25-APR-2002; 2002WO-US013346.

XX 01-MAY-2001; 2001US-0287971P.

XX (REGC) UNIV CALIFORNIA.

XX Prusiner SB, Peretz D, Williamson RA, Burton DR;

XX WPI; 2003-140150/13.

XX Composition for clearing a disease conformation of a protein, especially

XX PrPSc protein, and treating, e.g., Creutzfeldt-Jakob disease comprises

XX molecules, e.g., antibodies which bind and prevent conversion to disease

XX conformation.

XX Disclosure; Page 37-38; 38pp; English.

XX The invention relates to composition for clearing a disease conformation

XX of a protein, especially pathogenic prion protein (PrPSc) from a cell.

XX The composition comprises molecules which bind a number of epitopes on a

XX first conformation of a protein, where the conversion to a second

XX conformation is prevented to allow a cell to clear protein in the second

XX conformation. The composition is useful for preventing or treating, e.g.,

XX kuru or Creutzfeldt-Jakob disease. It is also used as a vaccine. The

XX present sequence is bovine PrP protein

XX Sequence 263 AA;

XX Query Match 100.0%; Score 250; DB 6; Length 263;

XX Best Local Similarity 100.0%; Pred. No. 2.1e-23;

XX Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

XX 1 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 46

DB

171 VVYRPVDQYSNONNFVHDCVNITVKEHTVTTTGTGKGFETDIDKMM 216

Search completed: December 3, 2004, 00:55:42
 Job time : 77.1639 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37; Search time 13.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221
Perfect score: 250
Sequence: 1 VYRPVDOYSNONNFVHDCV.....HTVTTTGTGENTETDIDKM 46

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	250	100.0	256 2 J00268	major prion protei
2	250	100.0	264 2 A54330	major prion protei
3	247	98.8	264 2 S37137	prion protein - gr
4	245	98.0	226 2 A53892	prion-related prot
5	245	98.0	241 2 S71048	major prion protei
6	245	98.0	241 2 S71056	major prion protei
7	245	98.0	245 2 S53627	major prion protei
8	245	98.0	245 2 S71045	major prion protei
9	245	98.0	252 2 S53631	major prion protei
10	245	98.0	253 2 S53624	major prion protei
11	245	98.0	253 2 S53623	major prion protei
12	245	98.0	253 2 S53620	major prion protei
13	245	98.0	253 2 S53625	major prion protei
14	245	98.0	253 2 I84423	major prion protei
15	245	98.0	253 2 S71055	major prion protei
16	245	98.0	253 2 S53616	major prion protei
17	245	98.0	253 2 S53618	major prion protei
18	245	98.0	253 2 A23544	major prion protei
19	245	98.0	254 2 A23544	major prion protei
20	244	97.6	260 2 S53629	major prion protei
21	243	97.2	256 2 S37149	prion protein - go
22	243	97.2	256 2 A54281	major prion protei
23	242	96.8	232 2 S71041	major prion protei
24	242	96.8	252 2 S53634	major prion protei
25	242	96.8	253 2 S53634	major prion protei
26	242	96.8	253 2 I37032	major prion protei
27	242	96.8	254 2 B34759	prion protein - go
28	242	96.8	254 2 A34759	prion protein - Ch
29	241	96.4	239 2 S53633	major prion protei

30	241	96.4	252 2 I61848	major prion protei
31	239	95.6	253 1 U0H1	major prion protei
32	239	95.6	254 1 U0H1	major prion protei
33	239	95.6	257 2 A23545	major prion PrP-Sc
34	238	95.2	252 2 J06175	major prion PrP-Sc
35	237	94.8	253 2 S53617	major prion protei
36	237	94.8	253 2 S53635	prion protein - B1
37	237	94.8	253 2 I61847	major prion protei
38	237	94.8	257 2 J02900	major prion protei
39	73	29.2	267 1 U0H1	major prion protei
40	73	29.2	267 1 A37372	prion protein homo
41	73	29.2	273 2 A46280	prion protein - Ch
42	64	25.6	139 2 H90004	hypothetical prote
43	60	24.0	170 2 B84257	flagellin A2 precu
44	60	24.0	194 2 B28944	flagellin A2 precu
45	58.5	23.4	193 1 C28944	flagellin B1 precu

ALIGNMENTS

RESULT 1
J00268
major prion protein 2 precursor - bovine
N:Alternate names: prion protein, short variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C:Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C:Accession: J00268
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: J00952
A:Accession: J00268
A:Molecule type: DNA
A:Residues: 1-256 <YOS>
A:Cross-references: UNIPROT:Q01880
C:Superfamily: major prion protein
C:Key words: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domain: signal sequence #status predicted <Sig>
F:25-256/Product: major prion protein 2 #status predicted <MAT>
F:60-91/Region: 8-residue repeats
F:182-217/Diulfide bonds: #status predicted
F:184,200/Binding site: carbohydrate (Aan) (covalent) #status predicted

Query Match 100.0%; Score 250; DB 2; Length 256;
Best Local Similarity 100.0%; Pred. No. 2, 4e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTVKEHTVTTTGTGENTETDIDKM 46
DB 164 VYRPVDOYSNONNFVHDCVNTVKEHTVTTTGTGENTETDIDKM 209

RESULT 2
A54330
major prion protein 1 precursor - bovine
N:Alternate names: prion protein, long variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C:Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C:Accession: A54330; J00953; J00952; A48551; S07347; I46331
R:Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A:Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C-,
A:Reference number: A54330; MUID:91116314; PMID:1671225
A:Accession: A54330
A:Molecule type: DNA
A:Residues: 1-264 <GOL>
A:Cross-references: UNIPROT:P10279; GB:X55882; NID:9683; PIDN:CA43368.1; PID:9684
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: J00953
A:Accession: J00953
A:Molecule type: DNA
A:Residues: 1-264 <YOS>

A:Cross-references: GB:D10613; NID:g217595; PIDN:BA01468.1; PID:g217596
A:Accession: U09952
A:Molecule type: DNA
A:Residues: 1-217, 'K', 219-264 <Y02>
R:Yoshimoto, Y.; Iimura, T.; Ishiguro, N.; Horieuchi, M.; Imamura, M.; Shinagawa, M.
Virus Genes 6, 343-356, 1992
A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929
A:Reference number: A48551; MUID:93118243; PMID:1365024
A:Accession: A48551
A:Molecule type: mRNA
A:Residues: 1-217, 'K', 219-264 <Y03>
A:Cross-references: GB:AB001468; NID:g1888342; PIDN:BA19253.1; PID:g1888343
A:Experimental source: brain
A>Note: sequence extracted from NCBI backbone (NCBI:121620, NCBI:P:121621)
R:Hoppe, J.; Reekie, L.J.D.; Hunter, N.; Muthaup, G.; Beyreuther, K.; White, H.; Scott, Nature 336, 399-392, 1988
A:Title: Fibroblasts from brains of cows with new cattle disease contain scrapie-associated
A:Reference number: S07347; MUID:89057122; PMID:2904126
A:Accession: S07347
A:Molecule type: protein
A:Residues: 25-36 <H0P>
R:Punisher, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, J. Infect. Dis. 167, 602-613, 1993
A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform
A:Reference number: 146931; MUID:93179783; PMID:8440932
A:Accession: 146931
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-264 <PRU>
A:Cross-references: GB:S55629; NID:g26611; PIDN:AA25514.1; PID:g266112
C:Genetics:
A:Gene: PrP
C:Superfamily: major prion protein
C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domain: signal sequence #status predicted <SIG>
F:25-264/Product: major prion protein.1 #status predicted <MAT>
F:60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G-G)
F:190-225/Diulfidic bonds: #status predicted
F:192,208/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2, 5e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTKGFNFETDIKRM 46
Db 172 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTKGFNFETDIKRM 217

RESULT 3
S37137
prion protein - greater kudu
C:Species: Tragelaphus strepsiceros (greater kudu)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C:Accession: S37137
R:Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
Submitted to the EMBL Data Library, August 1993
A:Reference number: S37137
A:Accession: S37137
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-264 <MAP>
A:Cross-references: UNIPROT:P40242; EMBL:X74771; NID:g398937; PIDN:CAA52781.1; PID:g398938
C:Superfamily: major prion protein

```

RESULT 4
A:53892
  prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C>Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #ext_change 09-Jul-2004
C:Accession: A53892
R:Llao, Y.C., Tokes, Z., Lim, E., Lackey, A., Woo, C.H., Button, J.D., Clawson, G.A.
Lab. Invest. 57, 370-374, 1987
A>Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MUID:88037055; PMID:2889848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <L1A>
A:Cross-references: UNIPROT:P13852; GB:M20313; NID:g206391; PIDN:AAA1947.1; PID:g206392
C:superfamily: major prion protein

Query Match          98.0%; Score 245; DB 2; Length 226;
Beet local similarity 93.5%; Pred. No. 8,7e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

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QY      1 VYRPVDQYSNONNFVHDCVNITVKKEHTVTYTTTKGFNETIDIKM 46
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DB      133 VYRPVDQYSNONNFVHDCVNITVKHEHTVTYTTTKGFNETIDVKKM 178

RESULT 5
S71048
major prion protein - Callithecus moloch (fragment)
C:Species: Callithecus moloch
C:Date: 27-Oct-1996 #sequence__revision 07-Feb-1997 #text_change 09-Jul-2004
J:Accession: S71048; S53632
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:G475585; PIDN:AAC50100.1; PID:G475585
J:Schaefer, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J: Mol. Biol. 245, 362-374, 1995
A:title: Prion protein gene variation among primates.
A:Reference number: S53614; MOID:95139066; PMID:7637269
A:Accession: S53632
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203,'R',205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match          98.0%; Score 245; DB 2; Length 241;
Best Local Similarity 93.5%; Pred. No.9,4e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY      1 VYRPVDQYSNONNFVHDCVNITVKKEHTVTYTTTKGFNETIDIKM 46
        |||||.....|:::|||::|::|::|::|::|::|::|::|::|::|
DB      154 VYRPVDQYSNONNFVHDCVNITVKHEHTVTYTTTKGFNETIDVKKM 199

RESULT 6
S71056
major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C:Date: 27-Oct-1996 #sequence__revision 14-Feb-1997 #text_change 09-Jul-2004
J:Accession: S71056; S53621
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>

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A/Cross-references: UNIPROT:P40255; EMBL:U08303; NID:G474364; PIDN:AAC50091.1; PID:G4743
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53621
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-203, 'R', 205-240 <SCW>
A/Cross-references: EMBL:U08303
A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 241;
Best Local Similarity 93.5%; Pred. No. 9.4e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 153 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 199

RESULT 7
S53627
major prion protein - green monkey
C/Species: Cercopithecus aethiops (green monkey, grivet)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53627; S71043
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53627
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08291
R;Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71043
A/Molecule type: DNA
A/Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A/Cross-references: EMBL:U08291; NID:G474340; PIDN:AAC50080.1; PID:G474341
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 245;
Best Local Similarity 93.5%; Pred. No. 9.5e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 153 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 198

RESULT 8
S71045
major prion protein - Cercopithecus diana
C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S71045; S53628
R;Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNA
A/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:G474342; PIDN:AAC50081.1; PID:G4743
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269

A/Accession: S53628
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
A/Cross-references: EMBL:U08292
A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 245;
Best Local Similarity 93.5%; Pred. No. 9.5e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 153 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 198

RESULT 9
S53631
major prion protein - brown capuchin
C/Species: Cebus apella (brown capuchin, black-capped capuchin)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53631; S71044
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53631
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-252 <SCH>
A/Cross-references: UNIPROT:P40249; EMBL:U08295
R;Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71044
A/Molecule type: DNA
A/Residues: 1-209, 'E', 211-252 <SCW>
A/Cross-references: EMBL:U08295; NID:G474348; PIDN:AAC50084.1; PID:G474349
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 252;
Best Local Similarity 93.5%; Pred. No. 9.8e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 46
Db 160 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGGNFETDIKMM 205

RESULT 10
S53624
major prion protein - stump-tailed macaque
C/Species: Macaca arctoides (stump-tailed macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53624; S71051
R;Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53624
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08311
R;Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71051
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08311; NID:G475583; PIDN:AAC50099.1; PID:G475584

C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 206

RESULT 11

major prion protein - crab-eating macaque
C/Species: Macaca fascicularis (crab-eating macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53623; S71052
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53623
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-References: EMBL:U08298
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71052
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-References: EMBL:U08298; NID:g474354; PIDN:AAC50087.1; PID:g474355
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 206

RESULT 12

major prion protein - hamadryas baboon
C/Species: Papio hamadryas (hamadryas baboon)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003
C/Accession: S53620; S71058
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53620
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-References: EMBL:U08294
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71058
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-References: EMBL:U08294; NID:g474346; PIDN:AAC50083.1; PID:g474347
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;

Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 206

RESULT 13

major prion protein - Japanese macaque
C/Species: Macaca fuscata (Japanese macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C/Accession: S53625; S71053
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53625
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-References: UNIPROT:P40254; EMBL:U08301
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71053
A/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-References: EMBL:U08301; NID:g474360; PIDN:AAC50090.1; PID:g474361
C/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;
Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 46
DB 161 VYRPVDOYSNONNFVHDCVNTITVKEHTVTTTGTGENTETDVKM 206

RESULT 14

major prion protein precursor - rhesus macaque
C/Species: Macaca mulatta (rhesus macaque)
C/Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 09-Jul-2004
C/Accession: I64423; S53622; S71054
R/Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; Di Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A/Title: Infectious amyloid precursor gene sequences in primates used for experimental
A/Reference number: I36907; MUID:95083661; PMID:7991600
A/Accession: I64423
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: DNA
A/Residues: 1-253 <RES>
A/Cross-References: UNIPROT:P40254; EMBL:U15163; NID:g595850; PIDN:AAA6635.1; PID:g59586
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53622
A/Status: nucleic acid sequence not shown
A/Molecule type: DNA
A/Residues: 1-210, 'R', 212-253 <SCH>
A/Cross-References: EMBL:U08307
R/Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A/Reference number: S71041
A/Accession: S71054
A/Molecule type: DNA
A/Residues: 1-253 <SCW>
A/Cross-References: EMBL:U08307; NID:g474372; PIDN:AAC50095.1; PID:g474373
C/Superfamily: major prion protein

Query Match 98.0%; Score 245; DB 2; Length 253;
Best Local Similarity 93.5%; Pred. No. 9.9e-23;

C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 245; DB 2; Length 253;
 Best Local Similarity 93.5%; Pred. No. 9.9e-23;
 Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPPVQYSNQNPFVHDCVNIIVKHEVTYTTTKGENFTETDIKMM 46
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 DB 161 VYRPPVQYSNQNPFVHDCVNIIVKHEVTYTTTKGENFTETDVKMM 206

RESULT 15

S71055

major prion protein - pig-tailed macaque

C;Species: Macaca nemestrina (pig-tailed macaque)

C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C;Accession: S71055; S53626

R;Schaezel, H.M.

Submitted to the EMBL Data Library, April 1994

A;Reference number: S71041

A;Accession: S71055

A;Molecule type: DNA

A;Residues: 1-253 <SCH>

A;Cross-references: UNIPROT:P40254; EMBL:U08306; NID:G474370; PIDN:JACS0094.1; PID:G4743

R;Schaezel, H.M.; da Costa, W.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A;Title: Prion protein gene variation among primates.

A;Reference number: S53614; MUID:95139066; PMID:7837269

A;Accession: S53626

A;Status: nucleic acid sequence not shown

A;Molecule type: DNA

A;Residues: 8-210; 'R', 212-247 <SCW>

A;Cross-references: EMBL:U08306

C;Superfamily: major prion protein

C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match

Best Local Similarity 98.0%; Score 245; DB 2; Length 253;

Matches 43; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

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 DB 161 VYRPPVQYSNQNPFVHDCVNIIVKHEVTYTTTKGENFTETDVKMM 206

Search completed: December 3, 2004, 00:38:42
 Job time : 14.8 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:09:28 ; Search time 74.3541 Seconds
(without alignments)
355.962 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221
Sequence score: 250
1 VYRPPVDQYNSQNNFVHDCV.....HTVTTTKEGNETFDIKM 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1825181 seqs, 575374646 residues
Total number of hits satisfying chosen parameters: 1825181

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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2	250	100.0	100	06EIQ2	06EIQ2 bos taurus
3	250	100.0	200	097912	097912 bison bonas
4	250	100.0	211	06J6V2	06J6V2 bos taurus
5	250	100.0	211	AA09128	AA09128 bos taurus
6	250	100.0	216	09TV00	09TV00 bos taurus
7	250	100.0	256	PRP2_BOVIN	PRP2_BOVIN
8	250	100.0	264	PRIO_BOVIN	PRIO_BOVIN
9	250	100.0	264	06UL03	06UL03 bos taurus
10	250	100.0	264	06UL04	06UL04 bos taurus
11	250	100.0	264	06UL05	06UL05 bos taurus
12	250	100.0	264	06UL06	06UL06 bos taurus
13	250	100.0	264	06UL07	06UL07 bos mutus 9
14	250	100.0	264	06UL09	06UL09 bos mutus 9
15	250	100.0	264	07YRN3	07YRN3 bos taurus
16	250	100.0	264	08G4M0	08G4M0 bos taurus
17	250	100.0	264	06EH52	06EH52 alluropoda
18	250	100.0	264	AA064642	AA064642 bos mutus
19	250	100.0	264	AA064643	AA064643 bos mutus
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27	250	100.0	264	08MJ17	08MJ17 bos taurus
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29	247	98.8	227	097909	097909 tragelaphus
30	247	98.8	256	PRP2_TRAST	PRP2_TRAST
31	247	98.8	264	PRP1_TRAST	PRP1_TRAST

32	245	98.0	215	2	097904	097904 bos javanic
33	245	98.0	238	1	PRIO_CERAT	095145 cervocobus
34	245	98.0	238	1	PRIO_THERG	095270 theropithec
35	245	98.0	241	1	PRIO_CALMO	P40248 callicebus
36	245	98.0	241	1	PRIO_MANSR	P40255 mandillius
37	245	98.0	245	1	PRIO_CERAB	P40250 cercopithec
38	245	98.0	246	1	PRIO_CERMO	P61761 cercopithec
39	245	98.0	246	1	PRIO_CERNO	P61762 cercopithec
40	245	98.0	246	1	PRIO_CERPO	095174 erythrocebu
41	245	98.0	246	1	PRIO_CERYA	095176 erythrocebu
42	245	98.0	252	1	PRIO_CERAP	P40249 cebus apell
43	245	98.0	253	1	PRIO_COLGU	P40251 colobus gue
44	245	98.0	253	1	PRIO_MACFA	P40254 macaca fasc
45	245	98.0	253	1	PRIO_PONPY	P40256 pongo pygma

ALIGNMENTS

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DT	01-OCT-2004 (TREMBLrel. 28, Created)								
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DT	01-OCT-2004 (TREMBLrel. 28, Last annotation update)								
DE	Prior protein (Fragment).								
OS	Bos taurus (Bovine).								
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;								
OC	Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;								
OC	Bovinae; Bos.								
OX	NCBI_TaxID=9913;								
RN	(1)								
RA	SEQUENCE FROM N.A.								
RP	Zhang L., Li N., Fan B.;								
RL	Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.								
DR	EMBL: AY320374; AA094050.1; -								
KW	Prior.								
FT	NON TER	1		1					
FT	NON TER	97		97					
SQ	SEQUENCE	97	AA;	11714	MM;	24C8DC7072FE98CE	CRC64;		
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Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;									
Qy	1	VYRPPVDQYNSQNNFVHDCVNIIVKSHVTTTITKGFETTDIKM	46						
Db	25	VYRPPVDQYNSQNNFVHDCVNIIVKSHVTTTITKGFETTDIKM	70						
RESULT 2									
ID	06EIQ2	PRELIMINARY;	PRT;	100	AA.				
AC	06EIQ2;								
DT	01-OCT-2004 (TREMBLrel. 28, Created)								
DT	01-OCT-2004 (TREMBLrel. 28, Last sequence update)								
DT	01-OCT-2004 (TREMBLrel. 28, Last annotation update)								
DE	Prior protein (Fragment).								
OS	Bos taurus (Bovine).								
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;								
OC	Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;								
OC	Bovinae; Bos.								
OX	NCBI_TaxID=9913;								
RN	(1)								
RA	SEQUENCE FROM N.A.								
RP	Zhang L., Li N., Fan B.;								
RL	Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.								
DR	EMBL: AY320371; AA094047.1; -								
KW	Prior.								
FT	NON TER	1		1					
FT	NON TER	100		100					
SQ	SEQUENCE	100	AA;	12065	MM;	4AF40583CB5B4169	CRC64;		

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Query Match      100.0%; Score 250; DB 2; Length 100;
Best Local Similarity 100.0%; Pred. No. 7,8e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 46
    |||
    29 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 74

RESULT 3
ID 097912 PRELIMINARY; PRT; 200 AA.
AC 097912;
DT 01-MAY-1999 (TRENBLrel. 10, Created)
DT 01-MAY-1999 (TRENBLrel. 10, Last sequence update)
DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Bison bonaeus (European bison).
OC Bkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bison.
OX NCBI_TaxID=9902;
RN [1]
RP SEQUENCE FROM N.A.
RC MEDLINE=99303687; PubMed=10373359;
RA Mopfer F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrP reveals high conservation
RT of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AF117328; AAD1999.1; -.
DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO: GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
FT NON_TER
FT NON_TER
SQ SEQUENCE 200 AA; 21674 MW; 1F270CDF4B5271B CRC64;

Query Match      100.0%; Score 250; DB 2; Length 200;
Best Local Similarity 100.0%; Pred. No. 1,7e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 46
    |||
    129 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 174

RESULT 4
ID 063672 PRELIMINARY; PRT; 211 AA.
AC 063672;
DT 05-JUL-2004 (TRENBLrel. 27, Created)
DT 05-JUL-2004 (TRENBLrel. 27, Last sequence update)
DT 05-JUL-2004 (TRENBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN Name=PrP;
OS Bos taurus (Bovine).
OC Bkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;

Query Match      100.0%; Score 250; DB 2; Length 211;
Best Local Similarity 100.0%; Pred. No. 1,8e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 46
    |||
    141 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 186

RESULT 5
ID AAT09128 PRELIMINARY; PRT; 211 AA.
AC AAT09128;
DT 20-MAY-2004 (TRENBLrel. 27, Created)
DT 20-MAY-2004 (TRENBLrel. 27, Last sequence update)
DT 20-MAY-2004 (TRENBLrel. 27, Last annotation update)
DE Prion protein (Fragment).
GN PRNP.
OS Bos taurus (Bovine).
OC Bkaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Butheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
RA Wang Z., Wang C., Wu X.;
RT "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
RT cattle."
RL Zhongguo Dongwu Jiaoyi 19:21-22(2002).
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
RA Wang Z., Wang C., Wu X.;
RL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
DR EMBL: AY585239; AAT09128.1; -.
KM Prion.
FT NON_TER
FT CHAIN
FT NON_TER
SQ SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match      100.0%; Score 250; DB 2; Length 211;
Best Local Similarity 100.0%; Pred. No. 1,8e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 46
    |||
    141 VYRPVDOYSONNPFVHDCVNITVKEHTVTTTGTGENTETD1KMM 186

```


DB 141 VYRPVQYNSQNNFVHDCVNIIVKEHTVTTTGTGKGFETTDIDIM 186

RESULT 6

ID Q9TV00 PRELIMINARY; PRT; 216 AA.

AC Q9TV00; 01-MAY-2000 (TrEMBLrel. 13, Created)
 DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
 DT 01-JUN-2003 (TrEMBLrel. 24, Last annotation update)
 DE Prion protein (Fragment).

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

OC Bovinae; Bos.

OC NCBI_TaxID=9913;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=PBL;

RX MEDLINE=99303687; PubMed=10373359;

RA Kofner F., Weidenhofer G., Schneider R., von Bruhn A., Gilch S.,

Schwarz T.F., Werner T., Schatzl H.M.,

"Analysis of 27 mammalian and 9 avian PrPs reveals high conservation

of flexible regions of the prion protein."

J. Mol. Biol. 289:1163-1178(1999).

CC -1- SIMILARITY: Belongs to the prion family.

DR EMBL: A017327; A019398.1; -

DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.

DR GO: GO:0007165; P:signal transduction; IEA.

DR InterPro: IPR001610; PAC.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion; 1.

DR Pfam: PF03991; Prion octapep; 6.

DR PRINTS: PR00341; PRION.

DR SMART: SM00086; PAC; 1.

DR SMART: SM00157; PRP; 1.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Prion.

FT NON_TER 1 1

FT NON_TER 216 216

SQ SEQUENCE 216 AA; 23425 MW; BE6BECF479966730 CRC64;

Query Match 100.0%; Score 250; DB 2; Length 216;

Best Local Similarity 100.0%; Pred. No. 1.8e-23; Indels 0; Gaps 0;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQYNSQNNFVHDCVNIIVKEHTVTTTGTGKGFETTDIDIM 46

DB 132 VYRPVQYNSQNNFVHDCVNIIVKEHTVTTTGTGKGFETTDIDIM 177

RESULT 7

PRP2_BOVIN STANDARD; PRT; 256 AA.

AC Q01860;

DT 01-JUN-1994 (Rel. 29, Created)

DT 01-JUN-1994 (Rel. 29, Last sequence update)

DT 29-MAR-2004 (Rel. 43, Last annotation update)

DE Major prion protein 2 precursor (Prp) (Major scrapie-associated fibril

protein 2).

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

OC Bovinae; Bos.

OC NCBI_TaxID=9913;

RN [1]

RP SEQUENCE FROM N.A.

RC TISSUE=Brain;

RX MEDLINE=93118243; PubMed=1362024;

RA Yoshimoto J., Iinuma T., Ishiguro N., Horiuchi M., Imamura M.,

RA Shinagawa M.;

RT "Comparative sequence analysis and expression of bovine PrP gene in

mouse L-929 cells."

RL Virus Genes 6:343-356(1992).

CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the

host genome and is expressed both in normal and infected cells.

CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called

"rods".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: Found in high quantity in the brain of humans and animals

infected with degenerative neurological diseases such as kuru,

Creutzfeldt-Jakob disease (CJD), Gerstmann-Strussler syndrome

(GSS), scrapie, bovine spongiform encephalopathy (BSE),

transmissible mink encephalopathy (TME), etc.

CC -1- SIMILARITY: Belongs to the prion family.

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or send an email to license@isb-sib.ch).

CC EMBL: D10614; BA01469.1; -

DR PRP; J00268; J00268.

DR HSSP: P10279; IDW.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion; 1.

DR Pfam: PF03991; Prion octapep; 5.

DR PRINTS: PR00341; PRION.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;

KW Signal.

FT SIGNAL 1 24

FT CHAIN 25 233

FT PROPEP 234 256

FT LIPTD 233 233

FT CARBOHYD 184 184

FT CARBOHYD 200 200

FT DISULFID 182 217

FT DOMAIN 54 95

FT REPEAT 54 62

FT REPEAT 63 70

FT REPEAT 71 78

FT REPEAT 79 86

FT REPEAT 87 95

SQ SEQUENCE 256 AA; 27880 MW; OD969F2D9033B30 CRC64;

Query Match 100.0%; Score 250; DB 1; Length 256;

Best Local Similarity 100.0%; Pred. No. 2.2e-23; Indels 0; Gaps 0;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQYNSQNNFVHDCVNIIVKEHTVTTTGTGKGFETTDIDIM 46

DB 164 VYRPVQYNSQNNFVHDCVNIIVKEHTVTTTGTGKGFETTDIDIM 209

RESULT 8

PRIO_BOVIN STANDARD; PRT; 264 AA.

AC P10279;

DT 01-MAR-1989 (Rel. 10, Created)

DT 01-NOV-1991 (Rel. 20, Last sequence update)

DT 01-OCT-2004 (Rel. 45, Last annotation update)

DE Major prion protein 1 precursor (Prp) (Major scrapie-associated fibril

protein 1).

OS Bos taurus (Bovine).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

CC Bovinae; Bos.
 OX NCBI_TaxID=9913;
 CC [1]
 CC SEQUENCE FROM N.A.
 RP STRAIN=Holstein-Friesian;
 RX MEDLINE=91116314; PubMed=1671225;
 RA Goldmann W., Hunter N., Martin T.,
 RT "Different forms of the bovine PrP gene have five or six copies of a
 RT short, G-C-rich element within the protein-coding exon.";
 RL J. Gen. Virol. 72:201-204(1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=93118243; PubMed=1362024;
 RA Yoshimoto T., Iinuma T., Ishiguro N., Horiuchi M., Imamura M.,
 RL Shingawa M.;
 RT "Comparative sequence analysis and expression of bovine PrP gene in
 RT mouse L-929 cells.";
 RL Virus Genes 6:343-356(1992).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=93179783; PubMed=8440932;
 RA Prusiner S.B., Fuzi M., Scott M., Serban D., Taraboulos A.,
 RA Gabriel J.M., Wells G.A., Wilesmith J.W., Bradley R.;
 RT "Immunologic and molecular biologic studies of prion proteins in
 RT bovine spongiform encephalopathy.";
 RL J. Infect. Dis. 167:602-613(1993).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian; TISSUE=Brain;
 RA Horiuchi M.;
 RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Jersey;
 RX MEDLINE=21422903; PubMed=11531705;
 RA Hills D., Comincini S., Schlaepfer J., Dolz G., Ferretti L.,
 RA Williams J.L.;
 RT "Complete genomic sequence of the bovine prion gene (PrNP) and
 RT polymorphism in its promoter region.";
 RL Anim. Genet. 32:231-232(2001).
 RN [6]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Korean;
 RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.;
 RT "Nucleotide sequence of PrP cDNA in Korean cattle.";
 RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
 RN [7]
 RP SEQUENCE OF 1-15 FROM N.A.
 RA Tanaka M., Inoue S., Ikeda T., Horiuchi M., Ishiguro N., Shingawa M.;
 RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RP SEQUENCE OF 25-36.
 RX MEDLINE=89057122; PubMed=2904126;
 RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.;
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-
 RT associated protein.";
 RL Nature 336:390-392(1988).
 RN [9]
 RP STRUCTURE BY NMR OF 132-241.
 RX MEDLINE=20359707; PubMed=10899999;
 RA Lopez Garcia F., Zahn R., Riek R., Wuehrlich K.;
 RT "NMR structure of the bovine prion protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339(2000).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rods".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
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 CC -----
 DR EMBL; X55882; CAA39368.1; -;
 DR EMBL; D10612; BAA01467.1; -;
 DR EMBL; D10613; BAA01468.1; -;
 DR EMBL; S55629; AAB25514.1; -;
 DR EMBL; AB001468; BAA19253.1; -;
 DR EMBL; AJ298878; CAC37367.1; -;
 DR EMBL; AF517842; AAM66709.1; -;
 DR EMBL; D26151; BAA05138.1; -;
 DR PIR; A54330; A54330.
 DR PDB; 1DMY; NMR; A=130-241.
 DR PDB; 1DMZ; NMR; A=130-241.
 DR PDB; 1DX0; NMR; A=23-241.
 DR PDB; 1DX1; NMR; A=23-241.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 6.
 DR PRINTS; PR00341; PRION.
 DR PROSITE; PS00291; PRION 1; 1.
 DR PROSITE; PS00706; PRION 2; 1.
 KW 3D-structure; Direct protein sequencing; Glycoprotein; GPI-anchor;
 KW Lipoprotein; Membrane; Polymorphism; Prion; Repeat; Signal.
 FT SIGNAL 1 24
 FT CHAIN 1 24
 FT PROPEP 25 241
 FT LIPID 242 264
 FT CARBOHYD 241 241
 FT CARBOHYD 192 192
 FT CARBOHYD 208 208
 FT DISULFID 190 225
 FT DOMAIN 54 103
 FT FT 54 103
 FT REPEAT 54 62
 FT REPEAT 63 70
 FT REPEAT 71 78
 FT REPEAT 79 86
 FT REPEAT 87 94
 FT REPEAT 95 103
 FT REPEAT 71 78
 FT VARIANT 71 78
 FT CONFLICT 218 218
 FT HELIX 136 138
 FT STRAND 140 141
 FT STRAND 141 141
 FT HELIX 155 162
 FT TURN 163 164
 FT HELIX 165 167
 FT STRAND 173 174
 FT HELIX 184 203
 FT TURN 204 206
 FT HELIX 211 237
 SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
 Query Match 100.0%; Score 250; DB 1; Length 264;
 Best Local Similarity 100.0%; Pred. No. 2,3e-23; Indels 0; Gaps 0;
 Matches 46; Conservative 0; Mismatches 0;
 Qy 1 VYRPVQYNSNNNFVHDCVNIIVKHTVTTTGTGKGFETDIDKMM 46
 Db 172 VYRPVQYNSNNNFVHDCVNIIVKHTVTTTGTGKGFETDIDKMM 217
 RESULT 9
 Q6UL03 PRELIMINARY; PRT; 264 AA.

```

AC 06UL03;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367643; AA064550.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; D499780FB26EFD0E CRC64;

Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTNGENFTETDIKMM 46
Db 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTNGENFTETDIKMM 217

RESULT 10
Q6UL04 PRELIMINARY; PRT; 264 AA.
ID 06UL04;
AC 06UL04;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367642; AA064649.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; F90214038316A101 CRC64;

Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTNGENFTETDIKMM 46

```

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Db 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTNGENFTETDIKMM 217

RESULT 11
Q6UL05 PRELIMINARY; PRT; 264 AA.
ID 06UL05;
AC 06UL05;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367640; AA064647.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28641 MW; 3B64CF6E215F89A0 CRC64;

Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTNGENFTETDIKMM 46
Db 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTNGENFTETDIKMM 217

RESULT 12
Q6UL06 PRELIMINARY; PRT; 264 AA.
ID 06UL06;
AC 06UL06;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE P10N protein.
GN Name=P1P;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367639; AA064646.1; -.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.

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SQ SEQUENCE 264 AA; 28584 MW; D06747B5374541D0 CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 46
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    172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

Db 172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

RESULT 13
O6UL07 PRELIMINARY; PRT; 264 AA.
ID O6UL07;
AC O6UL07;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 01-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE P10N protein.
GN Name=P10;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=30521;
OX NCBI_TaxID=30521;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367637; AAQ64644.1; -
DR EMBL; AY327450; AAQ63321.1; -
DR EMBL; AY367636; AAQ64643.1; -
DR InterPro: IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 46
    |||
    172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

Db 172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

RESULT 14
O6UL09 PRELIMINARY; PRT; 264 AA.
ID O6UL09;
AC O6UL09;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 01-OCT-2004 (TREMBlrel. 27, Last annotation update)
DE P10N protein.
GN Name=P10;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=30521;
OX NCBI_TaxID=30521;
RN [1]
RP SEQUENCE FROM N.A.

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RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367635; AAQ64642.1; -
DR InterPro: IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 6.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28642 MW; 1A909F038304293C CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 46
    |||
    172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

Db 172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

RESULT 15
O7YRN3 PRELIMINARY; PRT; 264 AA.
ID O7YRN3;
AC O7YRN3;
DT 01-OCT-2003 (TREMBlrel. 25, Created)
DT 01-OCT-2003 (TREMBlrel. 25, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE P10N protein precursor PrP.
GN Name=PRNP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=14722726;
RA Heaton M.P., Leymaster K.A., Freking B.A., Hawk D.A., Smith T.P.,
RA Keeler J.W., Snelling W.M., Fox J.M., Chitko-McKown C.G.,
RA Laegreid W.W.;
RT "Prion gene sequence variation within diverse groups of U.S. sheep,
RT beef cattle, and deer."
RL Mamm. Genome 14:765-777(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY35912; AAP84097.1; -
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion octapep; 6.
DR SMART; SM00086; PAC; 1.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW Prion; Signal.
FT SIGNAL 1
SQ SEQUENCE 264 AA; 28660 MW; F28D53C47205BF5 CRC64;
Query Match 100.0%; Score 250; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 46
    |||
    172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

Db 172 VYRPVQDYSNQNPFVHDCVNITVKEHTVTTTGGNFETDIXM 217

Search completed: December 3, 2004, 00:35:32
Job time : 75.3541 secs

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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 17.4197 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221

Perfect score: 250
Sequence: 1 VYRRPYDQYNSQNNFVHDCV.....HVTITTKGENTETDIXKM 46

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2_6/ptodata/1/1aa/5A.COMB.pep: *
2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep: *
3: /cgn2_6/ptodata/1/1aa/6A.COMB.pep: *
4: /cgn2_6/ptodata/1/1aa/6B.COMB.pep: *
5: /cgn2_6/ptodata/1/1aa/PTCUB.COMB.pep: *
6: /cgn2_6/ptodata/1/1aa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	250	100.0	219	4	US-09-380-015B-2
2	250	100.0	263	1	US-08-242-188-3
3	250	100.0	263	1	US-08-509-261A-3
4	250	100.0	263	1	US-08-660-626-9
5	250	100.0	263	1	US-08-692-892-3
6	250	100.0	263	2	US-08-713-939A-3
7	250	100.0	263	2	US-08-868-162A-23
8	250	100.0	263	3	US-09-031-168-9
9	250	100.0	263	3	US-09-036-579-3
10	250	100.0	263	3	US-09-550-374-3
11	250	100.0	263	4	US-09-943-906-3
12	250	100.0	263	4	US-09-669-516C-9
13	250	100.0	264	3	US-09-128-450-21
14	250	100.0	264	3	US-09-823-494-21
15	250	100.0	264	4	US-09-431-887-24
16	250	100.0	264	4	US-09-627-218B-11
17	247	98.8	264	4	US-09-431-887-27
18	245	98.0	245	4	US-09-431-887-5
19	245	98.0	245	4	US-09-431-887-15
20	245	98.0	252	4	US-09-431-887-17
21	245	98.0	253	4	US-09-431-887-3
22	245	98.0	253	4	US-09-431-887-7
23	245	98.0	253	4	US-09-431-887-9
24	245	98.0	253	4	US-09-431-887-10
25	245	98.0	253	4	US-09-431-887-11
26	245	98.0	253	4	US-09-431-887-12
27	245	98.0	253	4	US-09-431-887-14

28	245	98.0	253	4	US-09-431-887-16	Sequence 16, Appl
29	245	98.0	253	4	US-09-431-887-18	Sequence 18, Appl
30	245	98.0	254	1	US-08-242-188-1	Sequence 1, Appl
31	245	98.0	254	1	US-08-509-261A-1	Sequence 1, Appl
32	245	98.0	254	1	US-08-660-626-7	Sequence 1, Appl
33	245	98.0	254	1	US-08-692-892-1	Sequence 1, Appl
34	245	98.0	254	2	US-08-713-939A-1	Sequence 1, Appl
35	245	98.0	254	2	US-08-868-162A-21	Sequence 21, Appl
36	245	98.0	254	3	US-09-031-168-7	Sequence 1, Appl
37	245	98.0	254	3	US-09-128-450-19	Sequence 19, Appl
38	245	98.0	254	3	US-09-128-450-28	Sequence 28, Appl
39	245	98.0	254	3	US-09-036-579-1	Sequence 1, Appl
40	245	98.0	254	3	US-09-823-494-19	Sequence 19, Appl
41	245	98.0	254	3	US-09-823-494-28	Sequence 28, Appl
42	245	98.0	254	3	US-09-550-374-1	Sequence 1, Appl
43	245	98.0	254	4	US-09-431-887-20	Sequence 20, Appl
44	245	98.0	254	4	US-09-431-887-21	Sequence 21, Appl
45	245	98.0	254	4	US-09-627-218B-10	Sequence 10, Appl

ALIGNMENTS

```

RESULT 1
US-09-380-015B-2
; Sequence 2, Application US/09380015B
; Patent No. 6765088
; GENERAL INFORMATION:
; APPLICANT: Carsten Korth
; TITLE OF INVENTION: Immunological Detection of Prions
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Kanton Zuerich vertreten durch die Erziehungsdirektion
; STREET: Walchetur
; CITY: Zuerich
; STATE: Zuerich
; COUNTRY: Switzerland
; ZIP: CH-8090
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/380,015B
; FILING DATE: 23-Aug-1999
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: EP 97102837.8
; FILING DATE: 21-FEB-1997
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 219 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHEetical: YES
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Bos taurus
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-380-015B-2

Query Match      100.0%; Score 250; DB 4; Length 219;
Best Local Similarity 100.0%; Pred. No. 9.3e-26;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Ox 1 VYRRPYDQYNSQNNFVHDCVITVKEHTVTTTGGENTETDIXKM 46
Db 149 VYRRPYDQYNSQNNFVHDCVITVKEHTVTTTGGENTETDIXKM 194

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US-08-242-188-3
; Sequence 3, Application US/08242188
; Patent No. 5555186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bozicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: PC-DOS/MS-DOS
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188
; FILING DATE: 13-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/014001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 854-5277
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: BOVINE PRION PROTEIN, BODYP
; US-08-242-188-3
Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGGNFETETDIKMM 46
Db 171 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGGNFETETDIKMM 216
RESULT 3
US-08-509-261A-3
; Sequence 3, Application US/08509261A
; Patent No. 5763244
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: Method of Detecting Prions
; TITLE OF INVENTION: in a Sample and Transgenic Animal used fore
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bozicevic & Reed, LLP
; STREET: 285 Hamilton Avenue, Suite 200
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Pastero for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/509,261A
; FILING DATE: 31-JUL-1995
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 6510-030001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-327-3400
; TELEFAX: 650-327-3231
; TELEX:
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-509-261A-3
Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGGNFETETDIKMM 46
Db 171 VYRPVQYSNONNFVHDCVNIIVKEHTVTTTGGNFETETDIKMM 216
RESULT 4
US-08-660-626-9
; Sequence 9, Application US/08660626
; Patent No. 5789655
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Glenn C. Telling
; APPLICANT: Fred B. Cohen
; APPLICANT: Michael R. Scott
; TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
; TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Ascii
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,626
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Valeba Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-660-626-9

Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDKM 46
DB 171 VYRPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDKM 216

RESULT 5
US-08-692-892-3
Sequence 3, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn R.
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996

CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-692-892-3

Query Match 100.0%; Score 250; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDKM 46
DB 171 VYRPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDKM 216

RESULT 6
US-08-713-939A-3

Sequence 3, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:

FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:

INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-3

Query Match 100.0%; Score 250; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDKM 46
DB 171 VYRPVQYSONNPFVHDCVNITVKEHTVTTTGGNFETDIDKM 216

RESULT 7
US-08-868-162A-23
Sequence 23, Application US/08868162A
Patent No. 596269
GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-868-162A-23

Query Match 100.0%; Score 250; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDYNSQNNFVHDCVNITVKEHTVTTTGGENFTETDICKM 46
DB 171 VYRPVDDYNSQNNFVHDCVNITVKEHTVTTTGGENFTETDICKM 216

RESULT 8
US-09-031-168-9
Sequence 9, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIPOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Aaciti
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-09-031-168-9

Query Match 100.0%; Score 250; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDDYNSQNNFVHDCVNITVKEHTVTTTGGENFTETDICKM 46
DB 171 VYRPVDDYNSQNNFVHDCVNITVKEHTVTTTGGENFTETDICKM 216

RESULT 9
US-09-036-579-3
Sequence 3, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-3
Query Match 100.0%; Score 250; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Fri Dec 3 10:54:01 2004

us-10-031-975-24_copy_176_221.ra1

ORGANISM: bovine sp.
US-09-669-516C-9

Query Match 100.0%; Score 250; DB 4; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 46
171 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 216

RESULT 13
US-09-128-450-21
Sequence 21, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chasebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-128-450-21

Query Match 100.0%; Score 250; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 46
172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 217

RESULT 14
US-09-823-494-21
Sequence 21, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chasebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-823-494-21

Query Match 100.0%; Score 250; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 46

DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 217

RESULT 15
US-09-431-887-24
Sequence 24, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-431-887-24

Query Match 100.0%; Score 250; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 1.2e-25;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 46
172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKM 217

Search completed: December 3, 2004, 00:18:59
Job time : 18.4197 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 54.4459 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-24_COPY_176_221

Perfect score: 250
Sequence: 1 VYRPVDQXSNQNNFVHDCV.....HVTITTKGFNTEDIKRM 46

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 segs, 356623098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database :

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2: /cgn2_6/prodata/1/pubppa/PCT_NEW_PUB.pep:*
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5: /cgn2_6/prodata/1/pubppa/US07_NEW_PUB.pep:*
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10: /cgn2_6/prodata/1/pubppa/US09C_PUBCOMB.pep:*
11: /cgn2_6/prodata/1/pubppa/US09_NEW_PUB.pep:*
12: /cgn2_6/prodata/1/pubppa/US10A_PUBCOMB.pep:*
13: /cgn2_6/prodata/1/pubppa/US10B_PUBCOMB.pep:*
14: /cgn2_6/prodata/1/pubppa/US10C_PUBCOMB.pep:*
15: /cgn2_6/prodata/1/pubppa/US10D_PUBCOMB.pep:*
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18: /cgn2_6/prodata/1/pubppa/US60_NEW_PUB.pep:*
19: /cgn2_6/prodata/1/pubppa/US60_PUBCOMB.pep:*
20: /cgn2_6/prodata/1/pubppa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	250	100.0	117	14	US-10-050-902-349
2	250	100.0	117	14	US-10-050-898-349
3	250	100.0	117	14	US-10-346-190-90
4	250	100.0	161	9	US-09-745-003-9
5	250	100.0	256	13	US-10-109-551-2
6	250	100.0	256	16	US-10-479-218-3
7	250	100.0	263	9	US-09-943-906-3
8	250	100.0	263	14	US-10-435-602-3
9	250	100.0	264	9	US-09-823-494-21
10	250	100.0	264	14	US-10-209-194-2
11	250	100.0	264	14	US-10-355-780-11
12	250	100.0	264	14	US-10-304-630-24
13	250	100.0	264	14	US-10-301-488A-30

14	250	100.0	264	14	US-10-301-488A-33	Sequence 33, Appl
15	250	100.0	264	14	US-10-410-907A-13	Sequence 10, Appl
16	250	100.0	264	14	US-10-346-190-80	Sequence 83, Appl
17	250	100.0	264	14	US-10-417-964A-19	Sequence 19, Appl
18	250	100.0	264	15	US-10-301-448-30	Sequence 30, Appl
19	250	100.0	264	15	US-10-301-448-33	Sequence 33, Appl
20	250	100.0	264	16	US-10-479-218-2	Sequence 27, Appl
21	247	98.8	264	14	US-10-304-630-27	Sequence 32, Appl
22	246	98.4	264	14	US-10-417-964A-32	Sequence 324, App
23	245	98.0	124	14	US-10-050-902-324	Sequence 93, Appl
24	245	98.0	124	14	US-10-050-898-324	Sequence 12, Appl
25	245	98.0	124	14	US-10-346-190-93	Sequence 25, Appl
26	245	98.0	164	9	US-09-745-003-12	Sequence 121, App
27	245	98.0	225	15	US-10-301-448A-25	Sequence 5, Appl
28	245	98.0	225	15	US-10-301-448-25	Sequence 15, Appl
29	245	98.0	226	14	US-10-205-194-121	Sequence 17, Appl
30	245	98.0	245	14	US-10-304-630-5	Sequence 7, Appl
31	245	98.0	245	14	US-10-304-630-15	Sequence 9, Appl
32	245	98.0	252	14	US-10-304-630-17	Sequence 11, Appl
33	245	98.0	253	14	US-10-304-630-3	Sequence 12, Appl
34	245	98.0	253	14	US-10-304-630-7	Sequence 14, Appl
35	245	98.0	253	14	US-10-304-630-9	Sequence 16, Appl
36	245	98.0	253	14	US-10-304-630-10	Sequence 18, Appl
37	245	98.0	253	14	US-10-304-630-11	Sequence 19, Appl
38	245	98.0	253	14	US-10-304-630-12	Sequence 28, Appl
39	245	98.0	253	14	US-10-304-630-14	Sequence 1, Appl
40	245	98.0	253	14	US-10-304-630-16	Sequence 5, Appl
41	245	98.0	253	14	US-10-304-630-18	
42	245	98.0	254	9	US-09-823-494-19	
43	245	98.0	254	9	US-09-823-494-28	
44	245	98.0	254	9	US-09-943-906-1	
45	245	98.0	254	13	US-10-106-574-5	

ALIGNMENTS

RESULT 1
US-10-050-902-349
Sequence 349, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Piossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-902-349
Query Match 100.0%; Score 250; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,7e-24;

Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 46
Db 40 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 85

RESULT 2

US-10-050-898-349
Sequence 349, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisack, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plosek, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-898-349

Query Match 100.0%; Score 250; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,7e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 46
Db 40 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 85

RESULT 3

US-10-346-190-90
Sequence 90, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: PatentIn version 3.1
SEQ ID NO 90
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Bovine Prion Protein Fragment
US-10-346-190-90

Query Match 100.0%; Score 250; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 4,7e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 46
Db 40 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 85

RESULT 4

US-09-745-003-9
Sequence 9, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: P1P2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 9
LENGTH: 161
TYPE: PRT
ORGANISM: bovine
US-09-745-003-9

Query Match 100.0%; Score 250; DB 9; Length 161;
Best Local Similarity 100.0%; Pred. No. 6,7e-24;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 46
Db 69 VYRPVQYSNQNNFVHDCVNITVKEHTVTTTGGKGFETDIXMM 114

RESULT 5

US-10-109-551-2
Sequence 2, Application US/10109551
Publication No. US20020194635A1
GENERAL INFORMATION:
APPLICANT: DUNNE, PATRICK W.
APPLICANT: PIEDRAHITA, JORGE
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
FILE REFERENCE: TANK.20705
CURRENT APPLICATION NUMBER: US/10/109,551
CURRENT FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: 60/280,549
PRIOR FILING DATE: 2001-03-30
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 256
TYPE: PRT
ORGANISM: Bos taurus
US-10-109-551-2

Query Match 100.0%; Score 250; DB 13; Length 256;

Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 46
164 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 209

RESULT 6

US-10-479-218-3
Sequence 3, Application US/104792218
Publication No. US20040171082A1

GENERAL INFORMATION:
APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)
TITLE OF INVENTION: Diagnostic method

FILE REFERENCE: CG/P/135/WOD

CURRENT APPLICATION NUMBER: US/10/479,218

PRIOR FILING DATE: 2003-12-01

PRIOR APPLICATION NUMBER: GB 0113156.4

NUMBER OF SEQ ID NOS: 20

SOFTWARE: PatentIn version 3.1

SEQ ID NO: 3

LENGTH: 256

TYPE: PRT

ORGANISM: Ovis aries

US-10-479-218-3

Query Match 100.0%; Score 250; DB 16; Length 256;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 46
164 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 209

RESULT 7

US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. US20020150571A1

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP

NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:
ADDRESS: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.

ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906

FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match 100.0%; Score 250; DB 9; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 46
171 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 216

RESULT 8

US-10-435-602-3
Sequence 3, Application US/10435602
Publication No. US20030228303A1

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony

TITLE OF INVENTION: Antibodies Specific for Native PrP^{Sc}

FILE REFERENCE: UCAL059CON3

CURRENT APPLICATION NUMBER: US/10/435,602

PRIOR FILING DATE: 2003-05-09

PRIOR APPLICATION NUMBER: 09/943,906

PRIOR FILING DATE: 2001-08-30

PRIOR APPLICATION NUMBER: 09/550,374

PRIOR FILING DATE: 2000-04-13

PRIOR APPLICATION NUMBER: 09/036,579

PRIOR FILING DATE: 1998-03-06

PRIOR APPLICATION NUMBER: 08/713,939

PRIOR FILING DATE: 1996-09-13

PRIOR APPLICATION NUMBER: 08/528,104

PRIOR FILING DATE: 1995-09-14

NUMBER OF SEQ ID NOS: 86

SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO: 3

LENGTH: 263

TYPE: PRT

ORGANISM: bovine

US-10-435-602-3

Query Match 100.0%; Score 250; DB 14; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.2e-23;
Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 46
171 VYRPVQYNSQNNFVHDCVNITVKEHTVTTTGTGKGFETDIIKMM 216

RESULT 9

US-09-823-494-21
Sequence 21, Application US/09823494
Publication No. US20010041790A1

GENERAL INFORMATION:

APPLICANT: Chesebro, Bruce W
Chabry, Joelle

APPLICANT: Piola, Susette

TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion

FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494

; CURRENT FILING DATE: 2001-03-30
 ; PRIOR APPLICATION NUMBER: 09/128,450
 ; PRIOR FILING DATE: 1998-08-03
 ; NUMBER OF SEQ ID NOS: 29
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 21
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Bos taurus
 ; US-09-823-494-21

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
 DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 217

RESULT 10
 ; US-10-209-194-2
 ; Sequence 2, Application US/10209194
 ; Publication No. US20030051264A1
 ; GENERAL INFORMATION:
 ; APPLICANT: LILJEDAHN, MONIKA
 ; APPLICANT: ASPLAND, SIMON ERIC
 ; TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED
 ; TITLE OF INVENTION: SUSCEPTIBILITY TO MAD COW DISEASE
 ; FILE REFERENCE: BIOBANK.007A
 ; CURRENT APPLICATION NUMBER: US/10/209,194
 ; CURRENT FILING DATE: 2002-07-29
 ; PRIOR APPLICATION NUMBER: 60/309,222
 ; PRIOR FILING DATE: 2001-07-31
 ; PRIOR APPLICATION NUMBER: 60/367,091
 ; PRIOR FILING DATE: 2002-03-21
 ; NUMBER OF SEQ ID NOS: 15
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 2
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Bos Taurus
 ; US-10-209-194-2

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
 DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 217

RESULT 11
 ; US-10-355-780-11
 ; Sequence 11, Application US/10355780
 ; Publication No. US20030143224A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Pusineri, Stanley
 ; APPLICANT: Safar, Jiri
 ; APPLICANT: Williamson, Anthony
 ; APPLICANT: Burton, Dennis
 ; TITLE OF INVENTION: Antibodies Specific for Ungulate Prp
 ; FILE REFERENCE: UCAL-194
 ; CURRENT APPLICATION NUMBER: US/10/355,780
 ; CURRENT FILING DATE: 2003-01-30
 ; PRIOR APPLICATION NUMBER: US/09/627,218B
 ; PRIOR FILING DATE: 2000-07-27
 ; NUMBER OF SEQ ID NOS: 11
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 11
 ; LENGTH: 264
 ; TYPE: PRT

; ORGANISM: Bos taurus
 ; US-10-355-780-11

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
 DB 171 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 216

RESULT 12
 ; US-10-304-630-24
 ; Sequence 24, Application US/10304630
 ; Publication No. US20030161836A1
 ; GENERAL INFORMATION:
 ; APPLICANT: D-gen Limited
 ; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 ; TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
 ; FILE REFERENCE: ICOT/P21952
 ; CURRENT APPLICATION NUMBER: US/10/304,630
 ; CURRENT FILING DATE: 2002-11-26
 ; PRIOR APPLICATION NUMBER: US/09/431,887
 ; PRIOR FILING DATE: 1999-11-02
 ; PRIOR APPLICATION NUMBER: GB 9824091.4
 ; PRIOR FILING DATE: 1999-11-04
 ; NUMBER OF SEQ ID NOS: 37
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 24
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Bos taurus
 ; US-10-304-630-24

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 46
 DB 172 VYRPVDOYSNONNFVHDCVNITVKEHTVTTTGGNFETDIDKMM 217

RESULT 13
 ; US-10-301-488A-30
 ; Sequence 30, Application US/10301488A
 ; Publication No. US2003016558A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FRANGIONE, Blas
 ; APPLICANT: WISNIEWSKI, Thomas
 ; APPLICANT: SIGURDSSON, Einar
 ; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 ; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN AMLIN,
 ; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 ; TITLE OF INVENTION: IMMUNE RESPONSE THERETO
 ; FILE REFERENCE: 5986/1K434US1
 ; CURRENT APPLICATION NUMBER: US/10/301,488A
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 60/331,801
 ; PRIOR FILING DATE: 2001-11-21
 ; NUMBER OF SEQ ID NOS: 55
 ; SOFTWARE: PatentIn Version 3.1
 ; SEQ ID NO 30
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Cow
 ; US-10-301-488A-30

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFTEIDIKM 46
 DB 172 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFTEIDIKM 217

RESULT 14

US-10-301-488A-33
 ; Sequence 33, Application US/10301488A
 ; Publication No. US2003016558A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FRANGIONE, Blas
 ; APPLICANT: MISNIEWSKI, Thomas
 ; APPLICANT: SIGURDSSON, Elmar
 ; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 ; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
 ; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGUTAMINE REPEATS FOR INDUCTION OF AN
 ; TITLE OF INVENTION: IMMUNE RESPONSE THEREO
 ; FILE REFERENCE: 5986/1K434US1
 ; CURRENT APPLICATION NUMBER: US/10/301,488A
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 60/331,801
 ; PRIOR FILING DATE: 2001-11-21
 ; NUMBER OF SEQ ID NOS: 55
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 33
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic
 ; FEATURE:
 ; NAME/KEY: misc.feature
 ; LOCATION: (132)..(133)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr,
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; FEATURE:
 ; NAME/KEY: misc.feature
 ; LOCATION: (139)..(141)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr,
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; US-10-301-488A-33

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFTEIDIKM 46
 DB 172 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFTEIDIKM 217

RESULT 15

US-10-410-907A-13
 ; Sequence 13, Application US/10410907A
 ; Publication No. US20030215880A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dennis R. Burton
 ; APPLICANT: R. Anthony Williamson
 ; APPLICANT: Gianluca Moroncini
 ; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
 ; TITLE OF INVENTION: USES THEREOF
 ; FILE REFERENCE: 22908-1229
 ; CURRENT APPLICATION NUMBER: US/10/410,907A
 ; CURRENT FILING DATE: 2003-04-08
 ; PRIOR APPLICATION NUMBER: 60/371,610
 ; PRIOR FILING DATE: 2002-04-09
 ; NUMBER OF SEQ ID NOS: 36
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 13

; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Bos taurus (bovine)
 ; US-10-410-907A-13

Query Match 100.0%; Score 250; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.2e-23;
 Matches 46; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFTEIDIKM 46
 DB 172 VYRPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFTEIDIKM 217

Search completed: December 3, 2004, 01:07:48
 Job time : 54.4459 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:52 ; Search time 59.6066 Seconds
(without alignments)
216,658 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214

Perfect score: 197
Sequence: 1 RPVDQYSNONNFVHDCVNTKEHTVTTTGGENFT 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 2002273 seqs, 358729299 residues

Total number of hits satisfying chosen parameters: 2002273

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

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2: geneseqp1990s:.*
3: geneseqp2000s:.*
4: geneseqp2001s:.*
5: geneseqp2002s:.*
6: geneseqp2003as:.*
7: geneseqp2003bs:.*
8: geneseqp2004s:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	197	100.0	117	ABG94358	ABG94358 Modified
2	197	100.0	117	ABG80670	ABG80670 Bovine pr
3	197	100.0	117	ADD24197	ADD24197 Modified
4	197	100.0	217	AB07317	AB07317 Cattle pr
5	197	100.0	217	AB07328	AB07328 Cattle pr
6	197	100.0	219	AAW70261	AAW70261 Bovine pr
7	197	100.0	219	AAW93571	AAW93571 Bovine pr
8	197	100.0	256	ABP57900	ABP57900 Bovine BS
9	197	100.0	263	AAH86716	AAH86716 Bovine pr
10	197	100.0	263	AAW69661	AAW69661 Bovine pr
11	197	100.0	263	AAW85902	AAW85902 Bovine pr
12	197	100.0	263	AAH65854	AAH65854 Bovine pr
13	197	100.0	263	ABP51788	ABP51788 Bovine pr
14	197	100.0	263	ABU58869	ABU58869 Bovine pr
15	197	100.0	263	AAE33228	AAE33228 Bovine pr
16	197	100.0	263	ADK15534	ADK15534 Bovine pr
17	197	100.0	264	AAV07995	AAV07995 Bovine pr
18	197	100.0	264	AAH61769	AAH61769 Bovine pr
19	197	100.0	264	AAH82113	AAH82113 Bovine pr
20	197	100.0	264	ABH04424	ABH04424 Bovine pr
21	197	100.0	264	AAE15604	AAE15604 Bovine pr
22	197	100.0	264	ABU07876	ABU07876 Bovine pr
23	197	100.0	264	AAE36754	AAE36754 Cow prion
24	197	100.0	264	ABP55139	ABP55139 Bovine pr
25	197	100.0	264	ABR42798	ABR42798 Bovine pr

26	197	100.0	264	ABR42801	ABR42801 Cattle pr
27	197	100.0	264	ADD24187	ADD24187 Bovine pr
28	197	100.0	264	ADH66886	ADH66886 Bovine w1
29	197	100.0	264	ADH06743	ADH06743 Bovine pr
30	197	100.0	264	ADH44555	ADH44555 Bovine pr
31	197	100.0	264	ADK15535	ADK15535 Bovine pr
32	197	100.0	264	ADL15208	ADL15208 Bovine pr
33	197	100.0	265	AAW50889	AAW50889 Bovine pr
34	197	100.0	264	AAH72361	AAH72361 Cow prion
35	194	98.5	255	AAH86717	AAH86717 Sheep pr1
36	194	98.5	255	AAW69662	AAW69662 Sheep pr1
37	194	98.5	255	AAW85903	AAW85903 Sheep pr1
38	194	98.5	255	AAH65855	AAH65855 Ovine pr1
39	194	98.5	255	ABP51789	ABP51789 Ovine pr1
40	194	98.5	255	ABU58870	ABU58870 Sheep pr1
41	194	98.5	255	AAH33229	AAH33229 Ovine pr1
42	194	98.5	255	ADK15536	ADK15536 Ovine pr1
43	194	98.5	256	AAH72362	AAH72362 Sheep pr1
44	194	98.5	256	AAH72365	AAH72365 Goat pr10
45	194	98.5	256	AAH08572	AAH08572 Oryx demm

ALIGNMENTS

RESULT 1
ABG94358
ID ABG94358 standard; protein; 117 AA.

AC ABG94358;
XX
DT 06-AUG-2003 (revised)
DT 10-DEC-2002 (first entry)
XX

DE Modified bovine prion protein fragment.

XX Human; mouse; rat; antimicrobial; antiallergic; immunomodulatory;
KW cytosol; antiviral; antidiabetic; hypoglycemic; antigen array;
KW vaccine; infectious disease.

XX Bos taurus.
OS
PN MO200256905-A2.
XX

XX 25-JUL-2002.

XX 21-JAN-2002; 2002MO-IB000166.

XX 19-JAN-2001; 2001US-0262379P.
XX 04-MAY-2001; 2001US-0288549P.
XX 05-OCT-2001; 2001US-0326998P.
XX 07-NOV-2001; 2001US-0331045P.

XX (CYTO-) CYTOS BIOTECHNOLOGY AG.

XX Renner WA, Bachmann M, Tisoe A, Maurer P, Lechner F, Sebbel P;
XX Piossek C;
XX WPI; 2002-627351/67.

XX Molecular antigen array used in the production of vaccines for infectious diseases.

XX Disclosure; Page 441; 441pp; English.

XX This invention relates to a novel ordered and repetitive antigen array used in the production of vaccines for infectious diseases. The invention also discloses a composition comprising a non-natural molecular scaffold comprising a core particle selected from a core particle of a non-natural origin and a core particle of natural origin and an organizer comprising at least one first attachment site, where the organizer is connected to the core particle by at least one covalent bond. Also disclosed is an antigen or antigenic determinant with at least one second attachment

CC site, where the antigen or antigenic determinant is amyloid beta peptide
 CC (Abeta1-42) or its fragment and where the second attachment site is
 CC selected from an attachment site not naturally occurring with the antigen
 CC or antigenic determinant and an attachment site naturally occurring with
 CC the antigen or antigenic determinant, where the second attachment site is
 CC capable of association through at least one non-peptide bond to the first
 CC attachment site and where the antigen or antigenic determinant and the
 CC scaffold interact through the association to form an ordered and
 CC repetitive antigen array. The invention also comprises a coat protein
 CC capable of forming a capsid which comprises mutant Qbeta coat proteins
 CC having an amino acid sequence selected from five amino acid sequences
 CC fully defined in the specification. The compounds of the invention may
 CC have antimicrobial, antileptic, immunomodulatory, cytostatic,
 CC antiviral, antidiabetic, or hypoglycaemic activities and may be used in
 CC immunisation and as a vaccine. The present sequence represents a protein
 CC sequence used to create the compositions of the invention. (Updated on 06
 CC -AUG-2003 to correct OS field.)

XX Sequence 117 AA;

Query Match 100.0%; Score 197; DB 5; Length 117;

Best Local Similarity 100.0%; Pred. No. 1.2e-19; Indels 0; Gaps 0;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36

43 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 78

ABG80670 standard; protein; 117 AA.

ABG80670;

29-NOV-2002 (first entry)

Bovine prion protein/cysteine-containing peptide fusion protein.

XX Molecular antigen array; vaccine; antigen; antimicrobial; mutant;
 XX molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutant;
 XX graft versus host disease; IGF-mediated allergic reaction; anaphylaxis;
 XX adult respiratory distress syndrome; ARDS; Crohn's disease;
 XX allergic asthma; acute lymphoblastic leukaemia; non-Hodgkin's lymphoma;
 XX Grave's disease; systemic lupus erythematosus; osteoporosis;
 XX inflammatory immune disease; myasthenia gravis; multiple sclerosis;
 XX immunoproliferative disease; lymphadenopathy; Alzheimer's disease;
 XX angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy;
 XX rheumatoid arthritis; diabetes; infectious disease; factor Xa;
 XX enterokinase; cysteine-containing linker.

XX Bos taurus.
 XX Synthetic.

WO200256907-A2.

25-JUL-2002.

21-JAN-2002; 2002WO-IB000168.

19-JAN-2001; 2001US-0262379P.

04-MAY-2001; 2001US-0288549P.

05-OCT-2001; 2001US-0326998P.

07-NOV-2001; 2001US-0331045P.

(CYTO-) CYTOS BIOTECHNOLOGY AG.
 (NOVS) NOVARTIS PHARMA AG.

(MAUR) MAURER P.
 (LECH) LECHNER F.

(ORTM) ORTMANN R.
 (LUBO) LUBROEND R.

(STAU) STAUFENBIEL M.
 (FREY) FREY P.

XX Maurer P, Lechner F, Ortmann R, Luboend R, Staufenbiel M, Frey P;
 PI Renner WA, Bachmann M, Tissot A, Seibel P, Piossek C;
 XX WPI; 2002-636514/68.

PT Molecular antigen array used in the production of vaccines for infectious
 PT diseases.
 PS Disclosure; Page 418; 418pp; English.

XX The invention relates to a composition comprising: (a) a non-natural
 CC molecular scaffold comprising: (i) a core particle selected from: (1) a
 CC core particle of a non-natural origin; and (2) a core particle of natural
 CC origin; and (ii) an organiser is connected to the core particle by at least
 CC one covalent bond; (b) an antigen or antigenic determinant with at least
 CC one second attachment site, where the antigen or antigenic determinant is
 CC amyloid beta peptide (Abeta 1-42) or its fragment, and where the second
 CC attachment site is selected from: (i) an attachment site not naturally
 CC occurring with the antigen or antigenic determinant; and (ii) an
 CC attachment site naturally occurring with the antigen or antigenic
 CC determinant, where the second attachment site is capable of association
 CC through at least one non-peptide bond to the first attachment site; and
 CC where the antigen or antigenic determinant and the scaffold interact
 CC through the association to form an ordered and repetitive antigen array.
 CC Also included is a process for producing a non-naturally occurring
 CC ordered and repetitive antigen array. The composition is used in
 CC immunisation and as a vaccine for diseases such as influenza, graft
 CC versus host disease, IGF-mediated allergic reactions, anaphylaxis, adult
 CC respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma,
 CC acute lymphoblastic leukaemia, non-Hodgkin's lymphoma, Grave's disease,
 CC systemic lupus erythematosus, inflammatory immune diseases, myasthenia
 CC gravis, immunoproliferative disease lymphadenopathy,
 CC angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy,
 CC rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease,
 CC osteoporosis and infectious diseases. The present sequence is a modified
 CC antigen for use in the array of the invention. The antigen is modified to
 CC possess a cleavage site (enterokinase or factor Xa) and a Cysteine-
 CC containing N- or C-terminal linker peptide which serves as the attachment
 CC point to a virus like particle or bacterial protein (the scaffold
 CC protein)

XX Sequence 117 AA;

Query Match 100.0%; Score 197; DB 5; Length 117;

Best Local Similarity 100.0%; Pred. No. 1.2e-19; Indels 0; Gaps 0;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 36

43 RPVDQYNNNNFVHDCVNTVKEHTVTTTGGENFT 78

ADD24197 standard; protein; 117 AA.

ADD24197;

15-JAN-2004 (first entry)

Modified bovine prion protein amino acid sequence.

XX vaccine composition; virus-like particle; core particle;
 DE first attachment site; antigen; antigenic determinant; prion protein;
 KM PrP; PrP peptide; vaccine; neuroprotective; anti-inflammatory;
 KM prion disease; Bovine Spongiform Encephalopathy; BSE;
 KM Creutzfeldt-Jakob Disease; prion.

XX Synthetic.
 OS prion.

```

PN      WO2003059386-A2.
XX
XX      24-JUL-2003.
XX
XX      17-JAN-2003; 2003WO-EP000460.
XX
XX      18-JAN-2002; 2002US-00050902.
XX      21-JAN-2002; 2002WO-IB000166.
XX      08-JUL-2002; 2002US-0393725P.
XX      18-JUL-2002; 2002US-0396590P.
XX
XX      (CYTO-) CYTOS BIOTECHNOLOGY AG.
XX
XX      Bachmann M, Maurer P, Pelliccioli E, Renner WA;
XX      WPI; 2003-598483/56.
XX
XX      A vaccine composition for preventing or treating prion diseases (e.g.
XX      Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
XX      phage) and at least one prion protein or peptide bound to the virus-like
XX      particle.
XX
XX      Disclosure; SEQ ID NO 90; 246pp; English.
XX
XX      This invention relates to a novel vaccine composition comprising a virus-
XX      like or a core particle with at least one first attachment site and at
XX      least one antigen or antigenic determinant that is a prion protein (PrP)
XX      or its dimer, or a PrP peptide, the antigen or antigenic determinant
XX      being bound to the virus-like or core particle. The vaccine of the
XX      invention may have neuroprotective or antiinflammatory activity. The
XX      composition is useful as a medicament or in manufacturing a medicament
XX      for the treatment or prevention of prion diseases. The prion diseases may
XX      include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
XX      Disease. The present sequence is the amino acid sequence of a modified
XX      bovine prion protein (PrP) which may be used during the creation of the
XX      vaccine composition of the invention.
XX
XX      Sequence 117 AA:
XX
XX      Query Match      100.0%; Score 197; DB 7; Length 117;
XX      Best Local Similarity 100.0%; Pred. No. 1.2e-19;
XX      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX      1 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTNGENFT 36
XX      43 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTNGENFT 78
XX
XX      RESULT 4
XX      ID AAB07317 standard; protein; 217 AA.
XX
XX      AC AAB07317;
XX
XX      DT 12-SEP-2003 (revised)
XX      DT 17-OCT-2000 (first entry)
XX
XX      DE Cattle prion protein sequence.
XX
XX      KW Cattle; prion protein; transmissible spongiform encephalopathy;
XX      bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
XX
XX      OS Bos taurus.
XX
XX      FH Key
XX      FT Region
XX      FT Disulfide-bond
XX      FT Modified-site
XX
XX      Location/Qualifiers
XX      /note= "Repeat region consisting of tandem repeats of
XX      repeat unit: PHGGGWGQ (AAB07319)"
XX      166..201
XX      /note= "C-terminal phospho-inositol glycolipid membrane
XX      anchor (-GPI)"

```

```

PN      WO200029850-A1.
XX
XX      25-MAY-2000.
XX
XX      27-OCT-1999; 99WO-FI000897.
XX
XX      17-NOV-1998; 98FI-00002481.
XX
XX      (WALL-) WALLAC OY
XX      (BBSR-) BBSRC OFFICE.
XX
XX      Hope J, Barnard GJR, Birkett CR;
XX      WPI; 2000-387880/33.
XX
XX      Novel immunoassay for prion protein, used for the determination of
XX      transmissible spongiform encephalopathies in bovines.
XX
XX      Disclosure; Page 42-43; 50pp; English.
XX
XX      The present sequence is the cattle prion protein (PrP) sequence.
XX      Conversion of the normal cellular form of PrP into an aggregated,
XX      insoluble isoform is implicated in the pathogenesis of Transmissible
XX      Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX      Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
XX      and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
XX      this protein in body fluid or tissue samples may be measured by an assay
XX      of the present invention, in which a PrP epitope is captured by an
XX      antibody, which is then detected. The presence of PrP indicates BSE. PrP
XX      epitopes (AAB07320-B07326) are derived from the protease resistant core
XX      of PrP that is occluded when the PrP is in an aggregated state. (Updated
XX      on 12-SEP-2003 to standardise OS field)
XX
XX      Sequence 217 AA:
XX
XX      Query Match      100.0%; Score 197; DB 3; Length 217;
XX      Best Local Similarity 100.0%; Pred. No. 2.5e-19;
XX      Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX      1 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTNGENFT 36
XX      151 RPVDQYNSNNFVHDCVNIIVKHEHTVTTTNGENFT 186
XX
XX      RESULT 5
XX      ID AAB07328 standard; protein; 217 AA.
XX
XX      AC AAB07328;
XX
XX      DT 12-SEP-2003 (revised)
XX      DT 17-OCT-2000 (first entry)
XX
XX      DE Cattle prion protein sequence.
XX
XX      KW Cattle; prion protein; transmissible spongiform encephalopathy;
XX      bovine spongiform encephalopathy; TSE diagnosis; PrP.
XX
XX      OS Bos taurus.
XX
XX      FH Key
XX      FT Region
XX      FT Disulfide-bond
XX      FT Modified-site
XX
XX      Location/Qualifiers
XX      /note= "Repeat region consisting of tandem repeats of
XX      repeat unit: PHGGGWGQ (AAB07319)"
XX      166..201
XX      /note= "C-terminal phospho-inositol glycolipid membrane
XX      anchor (-GPI)"
XX
XX      WO200029849-A1.
XX      25-MAY-2000.

```

PF 27-OCT-1999; 99WO-FI000896.
 XX
 PR 17-NOV-1998; 98FI-00002480.
 XX
 PA (WALI-) WALIAC OY.
 PA (BBSR-) BBSRC OFFICE.
 PI Hope J, Barnard GJR, Birkett CR;
 XX
 XX WPI, 2000-399778/34.
 XX
 PT New immunoassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 217 AA;
 XX
 Query Match 100.0%; Score 197; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 2.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
 DB 151 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 186
 XX
 RESULT 6
 ID AAW70261 standard; protein; 219 AA.
 XX
 AC AAW70261;
 XX
 DT 13-NOV-1998 (first entry)
 XX
 DE Bovine prion protein.
 XX
 KM prion protein; PrP; cow; disease-specific prion protein; scrapie; Kuru;
 KM prion disease detection; bovine spongiform encephalopathy; therapy;
 KM Creutzfeldt-Jacob disease; Gerstmann-Strausler-Scheinker syndrome;
 KM Fatal Familial Insomnia.
 XX
 OS Bos taurus.
 XX
 PN EP861900-A1.
 XX
 PD 02-SEP-1998.
 XX
 PF 21-FEB-1997; 97EP-00102837.
 XX
 PR 21-FEB-1997; 97EP-00102837.
 XX
 PA (ERZI-) ERZIHUNGSDIREKTION CANTON ZURICH.
 XX
 PI Korth C, Stierli B, Moser M, Streiff P, Oesch B;
 XX
 XX WPI; 1998-449112/39.
 DR N-PSDB; AAV33005.
 XX

PT New monoclonal antibodies specifically bind to disease-specific prion
 PT proteins - used to diagnose, prevent and treat prion diseases e.g.
 PT bovine, spongiform encephalopathy, scrapie and Creutzfeldt-Jacob disease.
 XX
 PS Disclosure; Page 20-21; 35pp; English.
 XX
 CC This sequence represents the bovine prion protein (PrP). The protein is
 CC targeted by the antibody of the invention, which is a monoclonal antibody
 CC or fragment capable of specifically binding to native and denatured
 CC normal (PrPc) and disease-specific prion protein (PrPsc) in an antigen-
 CC antibody complex. The antibodies that immunoreact with disease-specific
 CC prion proteins are used in test kits for the diagnosis of prion diseases
 CC and to detect disease-specific PrP in biological material by treatment of
 CC a probe of the material with proteinase K and then with the monoclonal
 CC antibody. The monoclonal antibodies are used for the prevention and
 CC treatment of prion diseases and to clear biological material from prions.
 CC The antibodies are used to diagnose, treat and prevent e.g. bovine
 CC spongiform encephalopathy, scrapie in sheep and Creutzfeldt-Jacob
 CC disease, Gerstmann-Strausler-Scheinker syndrome, Fatal Familial Insomnia
 CC and Kuru in humans. The diagnostic method allows mass screening of
 CC infected cattle tissue at a subclinical stage and reduces possible human
 CC health risks
 XX
 SQ Sequence 219 AA;
 XX
 Query Match 100.0%; Score 197; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 2.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
 DB 152 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 187
 XX
 RESULT 7
 ID AAW93571 standard; protein; 219 AA.
 XX
 AC AAW93571;
 XX
 DT 17-JUN-1999 (first entry)
 XX
 DE Bovine rPrP protein.
 XX
 KM prion protein; PrP; rPrP; disease specific isoform; PrP(Sc); vaccine;
 KM treatment; diagnosis; Scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;
 KM detection.
 XX
 OS Bos taurus.
 XX
 PN DE19741607-A1.
 XX
 PD 25-MAR-1999.
 XX
 PF 20-SEP-1997; 97DE-01041607.
 XX
 PR 20-SEP-1997; 97DE-01041607.
 XX
 PA (PRIO-) PRIONICS AG.
 XX
 PI Moser M, Oesch B, Korth C;
 XX
 XX WPI; 1999-205964/18.
 DR
 XX
 PT New polypeptides comprising prion protein sequences - useful for
 PT diagnosis or treatment of prion diseases e.g. Scrapie, BSE and
 PT Creutzfeldt-Jacob disease.
 XX
 PS Claim 13; Page 6-7; 12pp; German.
 XX
 CC This invention describes a synthetic polypeptide comprising at least one
 CC "defined" PrP (prion protein) sequence or sequences derived therefrom
 CC that are recognised by a disease specific isoform of PrP, e.g. PrP(Sc),

CC binding substances. The new prion protein polypeptides are useful in
 CC vaccines and pharmaceuticals for treatment of, and as diagnostic agents
 CC for diagnosis of Scrapie, BSE, Kuur and Creutzfeldt-Jacob disease. The
 CC polypeptides are also useful in pharmaceutical or chemical libraries for
 CC detection of PrP(Sc)-specific agents

XX
 SQ Sequence 219 AA;

Query Match 100.0%; Score 197; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 2.5e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 36
 |||
 DB 152 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 187

RESULT 8

ABP57900
 ID ABP57900 standard; protein; 256 AA.

XX
 AC ABP57900;

XX
 DT 12-FEB-2003 (first entry)

XX
 DE Bovine BSE-resistant prion protein.

XX
 KM Transmissible spongiform encephalopathy; neuroprotective; prion protein;

XX
 KM bovine spongiform encephalopathy; transgenic; BSE; bovine; cervid; PrP;

XX
 KM TSE.

XX
 OS Bos taurus.

XX
 PN MO200279416-A2.

XX
 PD 10-OCT-2002.

XX
 PF 28-MAR-2002; 2002MO-US009652.

XX
 PR 30-MAR-2001; 2001US-0280549P.

XX
 PA (TEXA) UNIV TEXAS A & M SYSTEM.

XX
 PI Dunne PW, Piedrahita J;

XX
 DR WPI; 2003-092895/08.

XX
 N-PSDB; ABV99701.

XX
 PS Claim 1; Fig 6; 98pp; English.

XX
 CC The invention relates to a novel transgenic bovine/cervid comprising a

XX
 CC transgene encoding a mutant prion protein (PrP) polypeptide, in which a

XX
 CC substitution has been made at position 171 of the sequence, which renders

XX
 CC the bovine/cervid resistant to bovine spongiform encephalopathy (BSE) and

XX
 CC transmissible spongiform encephalopathy (TSE) disease, respectively. The

XX
 CC transgene of the invention has neuroprotective activity. The method is

XX
 CC useful for producing a transgenic bovine or cervid resistant to BSE and

XX
 CC TSE diseases. The bovine prion gene is useful for producing transgenic

XX
 CC cattle exhibiting resistance to bovine spongiform encephalopathy. The

XX
 CC sequence represents the mutant bovine PrP polypeptide

XX
 SQ Sequence 256 AA;

Query Match 100.0%; Score 197; DB 6; Length 256;

Best Local Similarity 100.0%; Pred. No. 3e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 36

DB |||
 167 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 202

RESULT 9

AAR6716
 ID AAR6716 standard; protein; 263 AA.

XX
 AC AAR6716;

XX
 DT 15-OCT-1996 (first entry)

XX
 DE Bovine prion protein, BoPrP.

XX
 KM Chimeric gene; chimeric prion; transgenic animal; diagnosis;

XX
 KM spongiform encephalopathy; PrP; central nervous system; CNS;

XX
 KM Creutzfeldt-Jacob disease; CJD; BSE.

XX
 OS Bos taurus.

XX
 PN MO951466-A1.

XX
 PD 23-NOV-1995.

XX
 PF 10-APR-1995; 95MO-US004426.

XX
 PR 13-MAY-1994; 94US-00242188.

XX
 PA (REGC) UNIV CALIFORNIA.

XX
 PI Prusiner SB, Scott MR, Telling G;

XX
 DR WPI; 1996-010868/01.

XX
 PT Chimeric prion protein gene - for formation of a transgenic animal

XX
 PT susceptible to prion infection by prion(s) normally specific for a

XX
 PT different species.

XX
 PS Disclosure; Page 42-43; 65pp; English.

XX
 CC Pathogenic prions in a sample can be detected by injecting the sample to

XX
 CC be tested into a transgenic mouse. The mouse genome includes a chimeric

XX
 CC PrP gene in which the gene includes a portion of a gene of the animal

XX
 CC (e.g. cattle) in danger of infection from prions in the sample. Preferred

XX
 CC transgenic mice express a chimeric prion protein (PrP) in which a segment

XX
 CC of the mouse PrP, MoPrP, is replaced with the corresponding bovine PrP

XX
 CC sequence

XX
 SQ Sequence 263 AA;

Query Match 100.0%; Score 197; DB 2; Length 263;

Best Local Similarity 100.0%; Pred. No. 3.1e-19;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 36

DB 174 RPVDQYSNQNPFVHDCVNITVKEHTVTTTKGENFT 209

RESULT 10

AAM69661
 ID AAM69661 standard; protein; 263 AA.

XX
 AC AAM69661;

XX
 DT 25-MAR-2003 (revised)

XX
 DT 19-OCT-1998 (first entry)

XX
 DE Bovine prion protein BoPrP.

XX
 KM Bovine; cow; prion protein; PrP; transgenic animal; artificial gene;

XX
 KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

```

OS Bos sp.
XX
XX US5792901-A.
XX
XX 11-AUG-1998.
XX
XX 30-JUL-1996; 96US-00692892.
XX
XX 13-MAY-1994; 94US-00242188.
XX 31-JUL-1995; 95US-00509261.
XX 31-AUG-1995; 95US-00521992.
XX
XX (REGC ) UNIV CALIFORNIA.
XX
XX Scott MR, Telling GC, Prusiner SB;
XX
XX WPI, 1998-456207/39.
XX
XX Transgenic mouse with altered PrP gene - for detecting disease-causing
XX prions.
XX
XX Example 8, Fig 4, 37pp; English.
XX
XX A transgenic mouse has been developed which comprises a genome in which
XX both alleles of an endogenous PrP (prion protein) gene of the mouse are
XX ablated, the genome containing operatively inserted all exogenous non-
XX mouse PrP gene. The mouse is susceptible to infection with prions which
XX generally only infect a genetically diverse mammal due to the presence of
XX the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
XX symptoms of prion disease within 200 days or less after inoculation with
XX prions which generally only infect a genetically diverse mammal. Also
XX described in the present invention are: (A) a method of producing the
XX transgenic mouse; and (B) determining the presence of infectious prions
XX in a sample obtained from a bovine. The transgenic mouse is used to
XX detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
XX disease of humans caused by prions. The present sequence represents
XX bovine prion protein (BoPrP), from the present invention. (Updated on 25-
XX MAR-2003 to correct PF field.)
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 197; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 3.1e-19;
XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 36
XX |||||
XX 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 209
XX
XX RESULT 11
XX AAW85902 standard; peptide; 263 AA.
XX
XX AAW85902;
XX
XX 12-FEB-1999 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
XX Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
XX cosmetic; therapeutic; bovine.
XX
XX Bos sp.
XX
XX OS US5846533-A.
XX
XX PN US5846533-A.
XX
XX XX 08-DEC-1998.
XX
XX PD 13-SEP-1996; 96US-00713939.
XX
XX PF 13-SEP-1996; 96US-00713939.
XX
XX PR 14-SEP-1995; 95US-00528104.
XX

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XX
XX (REGC ) UNIV CALIFORNIA.
XX PA (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI, 1999-058996/05.
XX
XX Antibody specific for scrapie isoform of prion protein - useful for
XX diagnosis and therapy.
XX
XX Disclosure; Col 43-44; 58pp; English.
XX
XX This represents a bovine prion protein (PrP) sequence. The invention
XX relates to an antibody that is capable of binding to native PrP(Sc), the
XX scrapie isoform of PrP. The antibody is produced by a method that
XX comprises synthesizing a library of antibodies on phages, contacting the
XX phages with a composition containing PrP proteins, isolating phages that
XX bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
XX and optionally analysing the phages to determine a nucleic acid sequence
XX encoding an amino acid sequence to which the native PrP(Sc) binds. The
XX antibody is used to detect disease-associated PrP, especially in
XX Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
XX can also be used to neutralise the infectivity of PrP(Sc). Assays using
XX the antibodies can be used to screen for disease-associated PrP in
XX pharmaceutical products, foods and cosmetics or for therapeutic purposes
XX
XX Sequence 263 AA;
XX
XX Query Match 100.0%; Score 197; DB 2; Length 263;
XX Best Local Similarity 100.0%; Pred. No. 3.1e-19;
XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
XX
XX 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 36
XX |||||
XX 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENT 209
XX
XX RESULT 12
XX AAG65854 standard; protein; 263 AA.
XX
XX AAG65854;
XX
XX 11-FEB-2002 (first entry)
XX
XX Bovine prion protein (PrP) sequence.
XX
XX PrP; prion protein; Creutzfeldt-Jakob disease; familial insomnie; PrP-Sc;
XX scrapie; Gerstmann-Strassler-Scheinker disease.
XX
XX Bos sp.
XX
XX OS US6290954-B1.
XX
XX PN US6290954-B1.
XX
XX PD 18-SEP-2001.
XX
XX PF 06-MAR-1998; 98US-00036579.
XX
XX PR 14-SEP-1995; 95US-00528104.
XX PR 13-SEP-1996; 96US-00713939.
XX
XX PA (SCRI ) SCRIPPS RES INST.
XX
XX Prusiner SB, Williamson RA, Burton DR;
XX
XX WPI, 2001-637939/73.
XX
XX Detecting a scrapie isoform of the prion protein (PrP-Sc) in a source,
XX particularly useful for detecting e.g. Creutzfeldt-Jakob disease or
XX Gerstmann-Strassler-Scheinker disease, by contacting the source with PrP-
XX Sc antibodies.
XX

```


PS Disclosure; Fig 3; 58pp; English.

XX CC The invention provides a method for detecting a scrapie isoform of the

CC prion protein (PrP-Sc) in a source. The method involves contacting the

CC source suspected of containing native PrP-Sc with a diagnostic amount of

CC an antibody characterized by its ability to bind to native PrP-Sc in

CC situ. The method is useful for detecting PrP-Sc in a source, which is

CC particularly useful for detecting Creutzfeldt-Jakob disease, fatal

CC familial insomnia or Gerstmann-Sträussler-Scheinker disease. The present

CC sequence represents the bovine PrP sequence

XX SQ Sequence 263 AA;

XX Query Match 100.0%; Score 197; DB 4; Length 263;

XX Best Local Similarity 100.0%; Pred. No. 3.1e-19;

XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36

DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 13

ID ABE51788 standard; protein; 263 AA.

XX AC ABE51788;

XX DT 03-OCT-2002 (first entry)

XX DE Bovine prion protein (PrP) SEQ ID NO:3.

XX KM Prion protein; PrP; scrapie; PrPSc; prion disease; immunoassay;

XX KM detection.

XX OS Bos sp.

XX PN US6372214-B1.

XX PD 16-APR-2002.

XX PF 13-APR-2000; 2000US-00550374.

XX PR 14-SEP-1995; 95US-00528104.

XX PR 13-SEP-1996; 96US-00713939.

XX PR 06-MAR-1998; 98US-00036579.

XX PA (RSCG) UNIV CALIFORNIA

XX PA (SCRI) SCRIPPS RES INST.

XX PI Prusiner SB, Williamson RA, Burton DR;

XX DR WPI; 2002-433675/46.

XX PT Immunoassays for detecting scrapie isoforms of prion protein (PrPSc) and

XX PT for purifying PrPSc from samples, useful e.g. in diagnosing PrPSc disease

XX PT and testing pharmaceuticals for contamination.

XX PS Disclosure; Fig 3; 58pp; English.

XX CC The present invention describes methods for detecting scrapie isoforms of

CC prion protein (PrPSc) infection in dead animals, purifying materials

CC suspected of containing PrPSc proteins and treating materials, using

CC antibodies specific for PrPSc. Also described: (1) method of determining

CC PrPSc infection in a dead animal, comprising: (a) extracting tissue from

CC an animal that has died; (b) contacting the tissue with an antibody

CC characterised by its ability to bind to native PrPSc in situ (the

CC antibody binds to a form of PrPSc specific to the animal that has died);

CC and (c) determining if the antibody has bound to PrPSc (the presence of

CC PrPSc in the tissue is indicative of PrPSc infection); (2) a method of

CC purifying a material suspected of containing a PrPSc protein, comprising:

CC (a) contacting the material with an antibody (characterized by its

CC ability to bind native PrPSc in situ) which is bound to a support surface

CC ; and (b) removing material not bound to the antibody; (3) a method of

CC treating a material, comprising applying (to the material) an antibody

CC that binds native PrPSc in situ. The methods are used for diagnosing and

CC detecting prion disease (scrapie) in dead animal tissue (i.e.

CC immunoassays), for separating PrPSc proteins from biological samples

CC (i.e. immunoprecipitation) and for treating materials. The present

CC sequence represents the bovine prion protein (PrP) which is given in the

CC exemplification of the present invention

XX SQ Sequence 263 AA;

XX Query Match 100.0%; Score 197; DB 5; Length 263;

XX Best Local Similarity 100.0%; Pred. No. 3.1e-19;

XX Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36

DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 14

ID ABE58869 standard; protein; 263 AA.

XX AC ABE58869;

XX DT 15-APR-2003 (first entry)

XX DE Bovine prion protein (PrP).

XX KM Prion protein; native prion protein; PrPSc; phage display library;

XX KM pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody;

XX KM scrapie; bovine spongiform encephalopathy; BSE; mad cow disease;

XX KM feline spongiform encephalopathy.

XX OS Bos sp.

XX PN US2002150571-A1.

XX PD 17-OCT-2002.

XX PF 30-AUG-2001; 2001US-00943906.

XX PR 14-SEP-1995; 95US-00528104.

XX PR 13-SEP-1996; 96US-00713939.

XX PR 06-MAR-1998; 98US-00036579.

XX PR 13-APR-2000; 2000US-00550374.

XX PA (PRUS/) PRUSINER S B.

XX PA (WILL/) WILLIAMSON R A.

XX PA (BURT/) BURTON D R.

XX PI Prusiner SB, Williamson RA, Burton DR;

XX DR WPI; 2003-198264/19.

XX PT Novel antibody that has the ability to specifically bind to native prion

XX PT protein PrPSc in situ, useful for detecting human PrPSc in a source, for

XX PT determining the cause of death of an animal, or in therapy.

XX PS Disclosure; Fig 3; 36pp; English.

XX CC The invention describes an antibody (I) that has the ability to

CC specifically bind to native prion protein PrPSc in situ, where (I) is

CC produced by synthesizing a library of antibodies on phage, panning the

CC library against a sample by bringing the phage into contact with a

CC composition comprising PrP proteins, and isolating phage which bind PrPSc

CC protein. (I) is useful for: detecting human PrPSc in a source; for

CC determining the cause of death of an animal (e.g. scrapie, bovine

CC spongiform encephalopathy) (BSE) or mad cow disease and feline spongiform

CC encephalopathy); for purifying a material suspected of containing PrPSc

CC protein, by contacting the material with a sufficient amount of (I) which

CC is bound to a support surface and removing material not bound to (I); for

CC treating a material by adding to the material a sufficient amount of (1)
 CC to neutralise PrPSc protein infectivity; in an assay to screen for the
 CC presence of prions (i.e. PrPSc) in products such as pharmaceuticals, food
 CC or cosmetics, in prion neutralisation to purify a product, in extraction
 CC of prion proteins, and in therapy. (1) provides a fast, efficient and
 CC cost effective assay for detecting the presence of PrPSc in a sample, and
 CC binds to a relatively high percentage of the infectious form of PrPSc.
 CC This is the amino acid sequence of a prion protein used in the creation
 CC of an anti-prion protein-antibody

XX Sequence 263 AA:

Query Match 100.0%; Score 197; DB 6; Length 263;

Best Local Similarity 100.0%; Pred. No. 3.1e-19; Mismatches 0; Gaps 0;

Matches 36; Conservative 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36

174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 15

AAE33228

ID AAE33228 standard; protein; 263 AA.

AC AAE33228;

DT 02-MAY-2003 (first entry)

DE Bovine PrP protein.

KM Bovine; pathogenic; prion protein; PrPSc; Creutzfeldt-Jakob disease;

KM kuru; vaccine; neuroprotective; immunostimulant.

OS Bos sp.

PN MO200287502-A2.

PD 07-NOV-2002.

PF 25-APR-2002; 2002MO-US013346.

PR 01-MAY-2001; 2001US-0287971P.

PA (REGC) UNIV CALIFORNIA.

PI Prusiner SB, Peretz D, Williamson RA, Burton DR;

DR WPI; 2003-140150/13.

PT Composition for clearing a disease conformation of a protein, especially
 PT PrPSc protein, and treating, e.g., Creutzfeldt-Jakob disease comprises
 PT molecules, e.g., antibodies which bind and prevent conversion to disease
 PT conformation.

PS Disclosure; Page 37-38; 38pp; English.

XX The invention relates to composition for clearing a disease conformation
 CC of a protein, especially pathogenic prion protein (PrPSc) from a cell.
 CC The composition comprises molecules which bind a number of epitopes on a
 CC first conformation of a protein, where the conversion to a second
 CC conformation is prevented to allow a cell to clear protein in the second
 CC conformation. The composition is useful for preventing or treating, e.g.,
 CC kuru or Creutzfeldt-Jakob disease. It is also used as a vaccine. The
 CC present sequence is bovine PrP protein

XX Sequence 263 AA:

Query Match 100.0%; Score 197; DB 6; Length 263;

Best Local Similarity 100.0%; Pred. No. 3.1e-19; Mismatches 0; Gaps 0;

Matches 36; Conservative 0; Indels 0; Gaps 0;

1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36

DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

Search completed: December 3, 2004, 00:55:43
 Job time : 60.6066 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:12:37 ; Search time 10.8 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214

Perfect score: 197
Sequence: 1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGENFT 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: PIR:.*
2: pir2:.*
3: pir3:.*
4: pir4:.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	197	100.0	256	2 JU0268	major prion protei
2	197	100.0	264	2 A54330	major prion protei
3	194	98.5	256	2 S37149	prion protein - go
4	194	98.5	256	2 A54281	major prion protei
5	194	98.5	264	2 S37137	prion protein - gr
6	193	98.0	226	2 A53892	prion-related prot
7	193	98.0	239	2 S53633	major prion protei
8	193	98.0	241	2 S71048	major prion protei
9	193	98.0	241	2 S71056	major prion protei
10	193	98.0	245	2 S53627	major prion protei
11	193	98.0	245	2 S71045	major prion protei
12	193	98.0	252	2 S53631	major prion protei
13	193	98.0	253	2 S53624	major prion protei
14	193	98.0	253	2 S53623	major prion protei
15	193	98.0	253	2 S53620	major prion protei
16	193	98.0	253	2 S53625	major prion protei
17	193	98.0	253	2 S53623	major prion protei
18	193	98.0	253	2 S71055	major prion protei
19	193	98.0	253	2 S53618	major prion protei
20	193	98.0	253	2 S53616	major prion protei
21	193	98.0	253	2 S53619	major prion protei
22	193	98.0	254	2 A23544	major prion protei
23	192	97.5	260	2 S53629	major prion protei
24	191	97.0	257	2 JQ1900	major prion protei
25	190	96.4	232	2 S71041	major prion protei
26	190	96.4	252	2 S53634	major prion protei
27	190	96.4	253	2 S53634	major prion protei
28	190	96.4	253	2 I37032	major prion protei
29	190	96.4	254	1 UH4YIH	major prion Prp-Sc

30	190	96.4	254	2 B34759	prion protein - go
31	190	96.4	254	2 A34759	prion protein - Ch
32	190	96.4	257	2 A23545	major prion PrP27-
33	189	95.9	252	2 I61848	major prion protei
34	189	95.9	252	2 JC6175	prion protein - ra
35	187	94.9	253	1 UCHU	major prion protei
36	185	93.9	253	2 S53617	major prion protei
37	185	93.9	253	2 S53635	major prion protei
38	185	93.9	253	2 I61847	major prion protei
39	165	28.7	267	1 UCH	major prion protei
40	56.5	28.7	267	1 A37372	prion protein homo
41	56.5	28.7	273	2 A46280	prion protein - ch
42	56	28.4	284	2 H89873	hypothetical prote
43	56	28.4	1169	2 S3181	flocculation prote
44	55	27.9	2541	2 T29340	hypothetical prote
45	54.5	27.7	415	2 AE3522	Leu/Ile/Val-bindin

ALIGNMENTS

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RESULT 1
JU0268
major prion protein 2 precursor - bovine
N:Alternate names: prion protein, short variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C/Accession: JU0268
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shingawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0952
A/Accession: JU0268
A/Molecule type: DNA
A/Residues: 1-256 <YOS>
A/Cross-references: UNIPROT:Q01880
C:Superfamily: major prion protein
C/Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domain: signal sequence #status predicted <SIG>
F:25-256/Product: major prion protein 2 #status predicted <MAT>
F:182-217/Disulfide bonds: #status predicted
F:184/200/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match      100.0%; Score 197; DB 2; Length 256;
Best local Similarity 100.0%; Pred. No. 1.8e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Cy      1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGENFT 36
Db      167 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGENFT 202

RESULT 2
A54330
major prion protein 1 precursor - bovine
N:Alternate names: prion protein, long variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C/Accession: A54330; JT0953; JT0952; A48551; S07347; I46931
R:Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A>Title: Different forms of the bovine PrP gene have five or six copies of a short, G-C
A/Reference number: A54330; PMID:1671225
A/Accession: A54330
A/Molecule type: DNA
A/Residues: 1-264 <GOL>
A/Cross-references: UNIPROT:P10279; GB:X55882; NID:G683; PIDN:CA9368.1; PID:G684
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shingawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0952
A/Accession: JT0953
A/Molecule type: DNA
A/Residues: 1-264 <YOS>

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A:Cross-references: GB:D10613; NID:g217595; PIDN:BA01468.1; PID:g217596
 A:Accession: J00952
 A:Molecule type: DNA
 A:Residues: 1-217, K', 219-264 <Y02>
 R.Yoshimoto, J.; Ihnma, T.; Ishiguro, N.; Horuchi, M.; Imamura, M.; Shingawa, M.
 Virus Genes 6, 343-356, 1992
 A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-929
 A:Reference number: A48551; MUID:93118243; PMID:1362024
 A:Accession: A48551
 A:Molecule type: mRNA
 A:Residues: 1-217, K', 219-264 <Y03>
 A:Cross-references: GB:AB001468; NID:g1888342; PIDN:BA19253.1; PID:g1888343
 A:Experimental source: brain
 A:Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBIP:121621)
 R.Hope, J.; Reekie, L.J.D.; Hunter, N.; Multhaup, G.; Beyreuther, K.; White, H.; Scott, N.
 Nature 336, 390-392, 1988
 A:Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
 A:Reference number: S07347; MUID:89057222; PMID:2904126
 A:Accession: S07347
 A:Molecule type: protein
 A:Residues: 25-36 <HOP>
 R.Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, J.
 Infect. Dis. 167, 602-613, 1993
 A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spongiform
 A:Reference number: I46931; MUID:93179783; PMID:8440932
 A:Accession: I46931
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-264 <PRU>
 A:Cross-references: GB:S55629; NID:g266111; PIDN:AA05514.1; PID:g266112
 C:Genetics:
 A:Gene: PrP
 C:Superfamily: major prion protein
 C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 F:1-24/Domain: signal sequence #status predicted <SIG>
 F:25-364/Product: major prion protein 1 #status predicted <MAT>
 F:60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G-G)
 F:190-225/Distillate bonds: #status predicted
 F:192,208/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 100.0%; Score 197; DB 2; Length 264;
 Best Local Similarity 100.0%; Pred. No. 1.9e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 36
 DB 175 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 210

RESULT 3
 S37149 prion protein - goat
 C:Species: Capra aegagrus hircus (domestic goat)
 C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: S37149
 R.Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A:Reference number: S37137
 A:Accession: S37149
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-256 <MAR>
 A:Cross-references: UNIPROT:P52113; EMBL:X74758; NID:g400442; PIDN:CAA52774.1; PID:g40044
 C:Superfamily: major prion protein

Query Match 98.5%; Score 194; DB 2; Length 256;
 Best Local Similarity 97.2%; Pred. No. 4.6e-18;
 Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 36
 DB 167 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 202

RESULT 4
 A54281 major prion protein - sheep
 C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
 C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: A54281; A55983
 R.Metcalf, D.; Zullini, V.; Cooper, C.M.; Da Costa, M.; Neuman, S.; Jenny, A.L.; Detwiler
 Genes Dev. 8, 959-969, 1994
 A:Title: Homozygosity for prion protein alleles encoding glutamine-171 renders sheep sus
 A:Reference number: A54281; MUID:95011594; PMID:7926780
 A:Accession: A54281
 A:Molecule type: DNA
 A:Residues: 1-256 <MRS>
 A:Cross-references: UNIPROT:Q46648; GB:X79912; NID:g510442; PIDN:CAA56283.1; PID:g1171580
 R.Goldmann, W.; Hunter, N.; Foster, J.D.; Salbaum, J.M.; Beyreuther, K.; Hope, J.
 Proc. Natl. Acad. Sci. U.S.A. 87, 2476-2480, 1990
 A:Title: Two alleles of a neural protein gene linked to scrapie in sheep.
 A:Reference number: A55983; MUID:90207218; PMID:1969635
 A:Accession: A55983
 A:Molecule type: DNA
 A:Residues: 1-170, 'R', 172-256 <GOL>
 A:Cross-references: GB:M1313; NID:g166039; PIDN:AA097765.1; PID:g166040
 C:Superfamily: major prion protein

Query Match 98.5%; Score 194; DB 2; Length 256;
 Best Local Similarity 97.2%; Pred. No. 4.6e-18;
 Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 36
 DB 167 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 202

RESULT 5
 S37137 prion protein - greater kudu
 C:Species: Tragelaphus strepsiceros (greater kudu)
 C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C:Accession: S37137
 R.Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A:Reference number: S37137
 A:Accession: S37137
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-264 <MAR>
 A:Cross-references: UNIPROT:P40242; EMBL:X74771; NID:g398937; PIDN:CAA52781.1; PID:g39893
 C:Superfamily: major prion protein

Query Match 98.5%; Score 194; DB 2; Length 264;
 Best Local Similarity 97.2%; Pred. No. 4.7e-18;
 Matches 35; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 36
 DB 175 RPVDQYSGNNFVHDCVNTVKEHTVTTTGTGENT 210

RESULT 6
 A53892 prion-related protein - rat (fragment)
 C:Species: Rattus norvegicus (Norway rat)
 C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
 C:Accession: A53892
 R.Jiao, Y.C.; Tokes, Z.; Lim, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
 Lab. Invest. 57, 370-374, 1987
 A:Title: Cloning of rat "prion-related protein" cDNA.
 A:Reference number: A53892; MUID:88037055; PMID:2889848
 A:Accession: A53892
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-226 <LIA>

A:Cross-references: UNIPROT:P13852; GB:M20313; NID:g206391; PIDN:AAA1947.1; PID:g206392
C:Superfamily: major prion protein

Query Match 98.0%; Score 193; DB 2; Length 226;
Best Local Similarity 94.4%; Pred. No. 5.4e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 36
Db 136 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 171

RESULT 7

553633
major prion protein - douroucouli (fragment)
C:Species: Aotus tigrisgatus (douroucouli, night monkey)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53633; S71042
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53633
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-239 <SCH>
A:Cross-references: UNIPROT:P40245; EMBL:U08293
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71042
A:Molecule type: DNA
A:Residues: 1-202, 'E', 204-239 <SCW>
A:Cross-references: EMBL:U08293; NID:g474344; PIDN:AAC50082.1; PID:g474345
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 239;
Best Local Similarity 94.4%; Pred. No. 5.7e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 36
Db 156 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 191

RESULT 8

571048
major prion protein - Callicebus moloch (fragment)
C:Species: Callicebus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71048; S53632
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53632
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 241;
Best Local Similarity 94.4%; Pred. No. 5.8e-18;

Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 36
Db 157 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 192

RESULT 9

571056
major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71056; S53621
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g47436
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08303
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 241;
Best Local Similarity 94.4%; Pred. No. 5.8e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 36
Db 157 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 192

RESULT 10

553627
major prion protein - green monkey
C:Species: Cercopithecus aethiops (green monkey, grivet)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53627; S71043
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: UNIPROT:P40250; EMBL:U08291
R:Schaezel, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 245;
Best Local Similarity 94.4%; Pred. No. 5.9e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 36
Db 156 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGENFT 191

RESULT 11

major prion protein - Cercopithecus diana

C/Species: Cercopithecus diana
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004C/Accession: S71045; S53628
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71045
A/Molecule type: DNAA/Residues: 1-245 <SCH>
A/Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474343; PIDN:AAC50081.1; PID:g4743R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53628
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>A/Cross-references: EMBL:U08292
A/Superfamily: major prion protein

C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 245;
Best Local Similarity 94.4%; Pred. No. 5, 9e-18;

Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 36
DB 156 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 191

RESULT 12

major prion protein - brown capuchin

C/Species: Cebus apella (brown capuchin, black-capped capuchin)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004C/Accession: S53631; S71044
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53631
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 1-252 <SCH>A/Cross-references: UNIPROT:P40249; EMBL:U08295
R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71044
A/Molecule type: DNAA/Residues: 1-209, 'E', 211-252 <SCW>
A/Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 252;
Best Local Similarity 94.4%; Pred. No. 6, 1e-18;

Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 36
DB 163 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 198

RESULT 13

major prion protein - stump-tailed macaque

C/Species: Macaca arctoides (stump-tailed macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003C/Accession: S53624; S71051
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269
A/Accession: S53624
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08311A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 253;
Best Local Similarity 94.4%; Pred. No. 6, 1e-18;

Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 36
DB 164 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 199

RESULT 14

major prion protein - crab-eating macaque

C/Species: Macaca fascicularis (crab-eating macaque)
C/Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003C/Accession: S53623; S71052
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53623
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 1-253 <SCH>
A/Cross-references: EMBL:U08298R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71052
A/Molecule type: DNAA/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08298; NID:g474354; PIDN:AAC50087.1; PID:g474355A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 253;
Best Local Similarity 94.4%; Pred. No. 6, 1e-18;

Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 36
DB 164 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 199

RESULT 15

major prion protein - hamadryas baboon

C/Species: Papio hamadryas (hamadryas baboon)
C/Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003C/Accession: S53620; S71058
R/Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995A/Title: Prion protein gene variation among primates.
A/Reference number: S53614; MUID:95139066; PMID:7837269A/Accession: S53620
A/Status: nucleic acid sequence not shownA/Molecule type: DNA
A/Residues: 1-210, 'E', 212-253 <SCW>
A/Cross-references: EMBL:U08298R/Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994A/Reference number: S71041
A/Accession: S71052
A/Molecule type: DNAA/Residues: 1-209, 'E', 211-252 <SCW>
A/Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349A/Superfamily: major prion protein
C/Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapieQuery Match 98.0%; Score 193; DB 2; Length 253;
Best Local Similarity 94.4%; Pred. No. 6, 1e-18;

Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 36
DB 164 RPVDYSNQNNFVHDCVNTTKKHTVTTTGGENFT 199

A;Title: Prion protein gene variation among primates.
A;Reference number: S53614; MUID:95139066; PMID:7837269
A;Accession: S53620
A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-253 <SCH>
A;Cross-references: EMBL:U08294
R;Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A;Reference number: S71041
A;Accession: S71058
A;Molecule type: DNA
A;Residues: 1-210,'E',212-253 <SCH>
A;Cross-references: EMBL:U08294; NID:9474346; PIDN:AAC50083.1; PID:9474347
C;Superfamily: major prion protein
C;Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 98.0%; Score 193; DB 2; Length 253;
Best Local Similarity 94.4%; Pred. No. 6.1e-18;
Matches 34; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSNQNPFVHDCVNIITVKSHVTTTKGENFT 36
164 RPVDQYSNQNPFVHDCVNIITVKSHVTTTKGENFT 199

Search completed: December 3, 2004, 00:38:43
Job time : 11.8 secs

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Result	Score	Query	Length	DB	ID	Description
No.						
1	197	100.0	97	2	Q6E1P9	Q6ei9 bos taurus
2	197	100.0	100	2	Q6E1Q2	Q6eiq bos taurus
3	197	100.0	200	2	Q6J9I2	Q6j9i2 Bison bonata
4	197	100.0	211	2	Q6J6V2	Q6j6v2 bos taurus
5	197	100.0	211	2	AA009128	AA009128 bos taurus
6	197	100.0	216	2	Q6T000	Q6t000 bos taurus
7	197	100.0	236	1	PRP2_BOVIN	Q01889 bos taurus
8	197	100.0	264	1	PR10_BOVIN	P10279 bos taurus
9	197	100.0	264	2	Q6UL03	Q6ul03 bos taurus
10	197	100.0	264	2	Q6UL04	Q6ul04 bos taurus
11	197	100.0	264	2	Q6UL05	Q6ul05 bos taurus
12	197	100.0	264	2	Q6UL06	Q6ul06 bos taurus
13	197	100.0	264	2	Q6UL07	Q6ul07 bos mutus ?
14	197	100.0	264	2	Q6UL09	Q6ul09 bos mutus ?
15	197	100.0	264	2	Q7YRN3	Q7Yrn3 bos taurus
16	197	100.0	264	2	Q6E4M0	Q6e4m0 bos taurus
17	197	100.0	264	2	Q6EH52	Q6eh52 alluropoda
18	197	100.0	264	2	AA064642	AA664642 bos mutus
19	197	100.0	264	2	AA064643	AA664643 bos mutus
20	197	100.0	264	2	AA064644	AA664644 bos mutus
21	197	100.0	264	2	AA064645	AA664645 bos taurus
22	197	100.0	264	2	AA064646	AA664646 bos taurus
23	197	100.0	264	2	AA064647	AA664647 bos taurus
24	197	100.0	264	2	AA064648	AA664648 bos taur
25	197	100.0	264	2	AA064649	AA664649 bos taur
26	197	100.0	264	2	AA064650	AA664650 bos taur
27	197	100.0	181	2	Q6HJ17	Q6hj17 bos taurus
28	197	98.5	181	2	Q6J911	Q6j911 budorcas t
29	194	98.5	195	2	Q6J903	Q6j903 addax naseo
30	194	98.5	197	2	Q6RV14	Q6rv14 ovls aries
31	194	98.5	197	2	Q6RV16	Q6rv16 ovls aries

32	194	98.5	197	2	06RYR	06RYR	ovis aries
33	194	98.5	197	2	AAR36137	AAR36137	ovis aries
34	194	98.5	197	2	AAR37329	AAR37329	ovis aries
35	194	98.5	197	2	AAR37331	AAR37331	ovis aries
36	194	98.5	202	2	097908	097908	capra nubia
37	194	98.5	223	2	097910	097910	hippoboscus
38	194	98.5	226	2	097907	097907	gazella sub
39	194	98.5	227	2	097909	097909	tragelaphus
40	194	98.5	246	2	0866W9	0866W9	cyanocephalus
41	194	98.5	256	1	PRIO_BUDPA	PRIO_BUDPA	budorcas
42	194	98.5	256	1	PRIO_CAPHI	PRIO_CAPHI	capra hircu
43	194	98.5	256	1	PRIO_OVICA	PRIO_OVICA	capra canad
44	194	98.5	256	1	PRIO_OVINU	PRIO_OVINU	ovis orient
45	194	98.5	256	1	PRP2_TRAST	PRP2_TRAST	tragelaphus

ALIGNMENTS

RESULT 1		
QGEI9P		
ID	QGEI9P	PRELIMINARY; PRT; 97 AA.
AC	QGEI9P;	
DT	01-OCT-2004 (TrEMBLrel. 28, Created)	
DT	01-OCT-2004 (TrEMBLrel. 28, Last sequence update)	
DT	01-OCT-2004 (TrEMBLrel. 28, Last annotation update)	
DE	Bion protein (Fragment).	
OS	Bos taurus (Bovine).	
OC	Eukaryote; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	
OC	Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;	
OC	Bovinae; Bos.	
OX	NCBI_TaxId=9913;	
RN	[1]	
RP	SEQUENCE FROM N.A.	
RA	Zhang L., Li N., Fan B.;	
RL	Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.	
DR	EMBL; AY320374; AAQ94050.1; -.	
KW	Prlon.	
FT	NON_TER 1 97	
SEQ	SEQUENCE 97 AA; 11714 MW; 24C8DC7072F5B8CE CRC64;	

Query Match	100.0%	Score 197;	DB 2;	Length 97;																										
Best Local Similarity	100.0%	Pred. No. 1,7e-19;																												
Matches	36;	Conservative	0;	Mismatches 0;																										
				Indels 0;																										
				Gaps 0;																										
QY	1	R	P	D	O	S	N	O	N	N	F	H	D	C	V	N	I	T	K	E	H	V	T	T	T	G	E	N	T	36
Db	28	R	P	D	O	S	N	O	N	N	F	H	D	C	V	N	I	T	K	E	H	V	T	T	T	G	E	N	T	63

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RESULT 2
Q6EIQ2 Q6EIQ2 PRLIMINARY; PRT; 100 AA.
AC Q6EIQ2;
DT 01-OCT-2004 (TREMBLrel. 28, Created)
DT 01-OCT-2004 (TREMBLrel. 28, Last sequence update)
DT 01-OCT-2004 (TREMBLrel. 28, Last annotation update)
DE Prion protein (Fragment).
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eute-
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RL Zhang L., Li N., Fan B.;
RA Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
DR EMBL; AY320371; AAQ94047.1; -.
KW Prion.
FT NON_TER 1 1
FT NON_TER 100 100
SQ SEQUENCE 100 AA; 12065 MW; 4AF40583CB5B4169 CRC64;

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Query Match 100.0%; Score 197; DB 2; Length 100;
 Best Local Similarity 100.0%; Pred. No. 8e-19;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 36
 DB 32 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 67

RESULT 3

PRELIMINARY; PRT; 200 AA.

ID 097912;
 AC 097912;
 DT 01-MAY-1999 (TRENBLrel. 10, Created)
 DT 01-MAY-1999 (TRENBLrel. 10, Last sequence update)
 DT 01-OCT-2003 (TRENBLrel. 25, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=Prp;
 OS Bison bonasus (European bison).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bison.
 OC NCBI_TaxID=9902;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian Prp reveals high conservation
 RT of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 CC -1- SIMILARITY: Belongs to the prion family.
 CC EMBL; AF117328; AAD19999.1; -;
 DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
 DR GO; GO:0007165; P:signal transduction; IEA.
 DR InterPro; IPR001610; PAC.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 6.
 DR SMART; SM00086; PAC; 1.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON_TER
 FT NON_TER
 SQ SEQUENCE 200 AA; 21674 MW; 1F270CDF4B5271B CRC64;

Query Match 100.0%; Score 197; DB 2; Length 200;
 Best Local Similarity 100.0%; Pred. No. 1.7e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 36
 DB 132 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 167

RESULT 4

PRELIMINARY; PRT; 211 AA.

ID 0616V2;
 AC 0616V2;
 DT 05-JUL-2004 (TRENBLrel. 27, Created)
 DT 05-JUL-2004 (TRENBLrel. 27, Last sequence update)
 DT 05-JUL-2004 (TRENBLrel. 27, Last annotation update)
 DE Prion protein (Fragment).
 GN Name=Prnp;
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_TaxID=9913;

RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RT "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
 RT cattle.";
 RL Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL; AY585239; AAT09128.1; -;
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR Pfam; PF03991; Prion_octapep; 5.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion.
 KW NON_TER
 FT NON_TER
 FT CHAIN
 FT NON_TER
 SQ SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 1.8e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 36
 DB 144 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 179

RESULT 5

PRELIMINARY; PRT; 211 AA.

ID AAT09128;
 AC AAT09128;
 DT 20-MAY-2004 (TRENBLrel. 27, Created)
 DT 20-MAY-2004 (TRENBLrel. 27, Last sequence update)
 DT 20-MAY-2004 (TRENBLrel. 27, Last annotation update)
 DE Prion protein (Fragment).
 GN PRNP.
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RT "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
 RT cattle.";
 RL Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RL Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AY585239; AAT09128.1; -;
 DR InterPro; IPR000817; Prion.
 KW Prion.
 KW NON_TER
 FT NON_TER
 FT CHAIN
 FT NON_TER
 SQ SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 1.8e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNTVKEHTVTTTGGENFT 36

CC Bovinae; Bos.
CX NCBI_TaxID=9913;
RN
RP
RC SEQUENCE FROM N.A.
RX STRAIN=Holstein-Friesian;
RA MEDLINE=91116314; PubMed=1671225;
RT Goldman W., Hunter N., Martin T., Dawson M., Hope J.;
RT "different forms of the bovine PrP gene have five or six copies of a
RT short, G-C-rich element within the protein-coding exon."
RL J. Gen. Virol. 72:201-204(1991).
RN
RP
RC SEQUENCE FROM N.A.
RX TISSUE=Brain;
RA MEDLINE=93118243; PubMed=1362024;
RT Yoshimoto J., Iinuma T., Ishiguro N., Horiuchi M., Imamura M.,
RA Shingawa M.;
RT "Comparative sequence analysis and expression of bovine PrP gene in
RL mouse L-929 cells."
RL Virus Genes 6:343-356(1992).
RN
RP
RC SEQUENCE FROM N.A.
RX MEDLINE=9319783; PubMed=8440932;
RA Prusiner S.B., Fuzi M., Scott M., Serban D., Serban H., Taraboulos A.,
RA Gabriel J.M., Wells G.A., Mittleman J.W., Bradley R.;
RT "Immunologic and molecular biologic studies of prion proteins in
RT bovine spongiform encephalopathy."
RL J. Infect. Dis. 167:602-613(1993).
RN
RP
RC SEQUENCE FROM N.A.
RX STRAIN=Holstein-Friesian; TISSUE=Brain;
RA Horiuchi M.;
RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
RN
RP
RC SEQUENCE FROM N.A.
RX STRAIN=Jersey;
RA MEDLINE=21422903; PubMed=11531705;
RA Hillis D., Comincini S., Schaeffer J., Dolf G., Ferretti L.,
RA Williams J.L.;
RT "Complete genomic sequence of the bovine prion gene (PrNP) and
RT polymorphism in its promoter region."
RL Anim. Genet. 32:231-232(2001).
RN
RP
RC SEQUENCE FROM N.A.
RX STRAIN=Korean;
RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.;
RL "Nucleotide sequence of PrP cDNA in Korean cattle."
RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
RN
RP
RC SEQUENCE OF 1-15 FROM N.A.
RA Tanaka T., Inoue S., Ikeda T., Horiuchi M., Ishiguro N., Shingawa M.;
RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
RN
RP
RC SEQUENCE OF 25-36.
RX MEDLINE=89057122; PubMed=2904126;
RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
RA White H., Scott A.C., Stack M.V., Dawson M., Wells G.A.;
RT "Fibrils from brains of cows with new cattle disease contain scrapie-
RT associated protein."
RL Nature 336:390-392(1988).
RN
RP
RC STRUCTURE BY NMR OF 132-241.
RX MEDLINE=20359707; PubMed=8999999;
RA Lopez Garcia F., Zahn R., Riek R., Muehrich K.;
RT "NMR structure of the bovine prion protein."
RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339(2000).
CC
CC
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rod".
CC
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC
CC -1- DISEASE: Found in high quantity in the brain of humans and animals
CC infected with degenerative neurological diseases such as kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

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CC (GSS), scrapable, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
CC -----
CC CC This SWISS-PROT entry is copyrighted. It is produced through a collaboration
CC CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC CC the European Bioinformatics Institute. There are no restrictions on its
CC CC use by non-profit institutions as long as its content is in no way
CC CC modified and this statement is not removed. Usage by and for commercial
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CC -----
DR EMBL; X55882; CAA39368.1; -.
DR EMBL; D10612; BAA01467.1; -.
DR EMBL; D10613; BAA01468.1; -.
DR EMBL; S55629; AAB25514.1; -.
DR EMBL; AB001468; BAA19253.1; -.
DR EMBL; AJ298878; CAC37367.1; -.
DR EMBL; AF517842; AAM66709.1; -.
DR EMBL; D26151; BAA05138.1; -.
DR PIR; A54330; A54330.
DR PDB; 1DWY; NMR; A=130-241.
DR PDB; 1DWZ; NMR; A=130-241.
DR PDB; 1DXO; NMR; A=23-241.
DR PDB; 1DXI; NMR; A=23-241.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00391; Prion_octapep; 6.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KW 3D-structure; Direct protein sequencing; Glycoprotein; GPI-anchor;
KW Lipoprotein; Membrane; Polymorphism; Prion; Repeat; Signal.
PT SIGNAL
PT CHAIN
PT PROPEP
PT Lipid
PT CARBOHYD
PT CARBOHYD
PT DISULFID
PT DOMAIN
PT REPEAT
PT REPEAT
PT REPEAT
PT REPEAT
PT REPEAT
PT REPEAT
PT VARIANT
PT COMPLECT
PT HELIX
PT STRAND
PT HELIX
PT TURN
PT HELIX
PT STRAND
PT HELIX
PT TURN
PT HELIX
SQ SEQUENCE
Query Match
Best Local Similarity
Matches
1 RPVDQYSNONNFVHDCNITVKEHTYTTTKGSEFT 36
175 RPVDQYSNONNFVHDCNITVKEHTYTTTKGSEFT 210
100.0%; Score 197; DB 1; Length 264;
100.0%; Pred. No. 2.3e-18;
0; Mismatches 0; Indels 0; Gaps 0;
PRELIMINARY; PRT; 264 AA.

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AC 06UL03;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DE EMBL: AY367643; AA064650.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; D499780FB26EFD0E CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTNGENFT 36
DB 175 RPVDQYSNONNFVHDCVNITVKEHTVTTTNGENFT 210

RESULT 10
Q6UL04 PRELIMINARY; PRT; 264 AA.
ID Q6UL04;
AC Q6UL04;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DE EMBL: AY367642; AA064649.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; F90214038316A101 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTNGENFT 36

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DB 175 RPVDQYSNONNFVHDCVNITVKEHTVTTTNGENFT 210

RESULT 11
Q6UL05 PRELIMINARY; PRT; 264 AA.
ID Q6UL05;
AC Q6UL05;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DE EMBL: AY367640; AA064647.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28641 MW; 3B64CF6E215F89A0 CRC64;

Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2,3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTNGENFT 36
DB 175 RPVDQYSNONNFVHDCVNITVKEHTVTTTNGENFT 210

RESULT 12
Q6UL06 PRELIMINARY; PRT; 264 AA.
ID Q6UL06;
AC Q6UL06;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DE Prion protein.
GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DE EMBL: AY367639; AA064646.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.

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SQ SEQUENCE 264 AA; 28584 MW; D06747B5374541D0 CRC64;
Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 36
Db 175 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 210

RESULT 13
O6UL07 PRELIMINARY; PRT; 264 AA.
AC O6UL07;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 01-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxId=30521;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RA Yang J., Zhao D., Li N.;
RL Submitted (Jun-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367637; AAQ64644.1; -
DR EMBL; AY327450; AAQ93321.1; -
DR EMBL; AY367636; AAQ64643.1; -
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PR00341; Prion.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 36
Db 175 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 210

RESULT 14
O6UL09 PRELIMINARY; PRT; 264 AA.
AC O6UL09;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxId=30521;
RN [1]
RP SEQUENCE FROM N.A.
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RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY367635; AAQ64642.1; -
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; 1A909F038304293C CRC64;
Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 36
Db 175 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 210

RESULT 15
O7YRN3 PRELIMINARY; PRT; 264 AA.
AC O7YRN3;
DT 01-OCT-2003 (TREMBlrel. 25, Created)
DT 01-OCT-2003 (TREMBlrel. 25, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE Prion protein precursor Prp.
GN Name=PRNP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxId=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=1472726;
RA Heaton M.P., Leymaster K.A., Freking B.A., Hawk D.A., Smith T.P.,
RA Keele J.W., Snelling W.M., Fox J.M., Chitko-McKown C.G.,
RA Laegreid W.W.;
RT "Prion gene sequence variation within diverse groups of U.S. sheep,
RT beef cattle, and deer";
RL Mamm. Genome 14:765-777(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL; AY355912; AAP84097.1; -
DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO; GO:0007165; P:signal transduction; IEA.
DR InterPro; IPR001610; PAC.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR Pfam; PF03991; Prion octapep; 6.
DR SMART; SM00086; PAC; 1.
DR SMART; SM00157; PrP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion; Signal.
FT SIGNAL 1
SQ SEQUENCE 264 AA; 28660 MW; F28D53C47205B5 CRC64;
Query Match 100.0%; Score 197; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 36
Db 175 RPVDQYSONNFFVHDCVNITVKEHTVTTTGGENFT 210

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Job time : 58.1902 secs
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Fri Dec 3 10:54:03 2004

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GenCore version 5.1.6
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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:06:16 ; Search time 13.6328 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214
Perfect score: 197
Sequence: 1 RPVDQYSNONFVHDCVNTVKEHTVTTTKGENFT 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 6631800 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
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2: /cgn2_6/ptodata/1/1aa/5B.COMB.pep.*
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6: /cgn2_6/ptodata/1/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	197	100.0	219	4 US-09-380-015B-2	Sequence 2, Appl
2	197	100.0	263	1 US-08-242-188-3	Sequence 3, Appl
3	197	100.0	263	1 US-08-509-261A-3	Sequence 3, Appl
4	197	100.0	263	1 US-08-660-626-9	Sequence 9, Appl
5	197	100.0	263	1 US-08-692-892-3	Sequence 3, Appl
6	197	100.0	263	2 US-08-713-939A-3	Sequence 3, Appl
7	197	100.0	263	2 US-08-868-162A-23	Sequence 23, Appl
8	197	100.0	263	3 US-09-031-168-9	Sequence 9, Appl
9	197	100.0	263	3 US-09-036-579-3	Sequence 3, Appl
10	197	100.0	263	3 US-09-550-374-3	Sequence 3, Appl
11	197	100.0	263	4 US-09-943-906-3	Sequence 3, Appl
12	197	100.0	263	4 US-09-669-516C-9	Sequence 9, Appl
13	197	100.0	264	4 US-09-128-450-21	Sequence 21, Appl
14	197	100.0	264	3 US-09-823-494-21	Sequence 24, Appl
15	197	100.0	264	4 US-09-451-887-24	Sequence 11, Appl
16	197	100.0	264	4 US-09-627-218B-11	Sequence 4, Appl
17	194	98.5	255	1 US-08-242-188-4	Sequence 4, Appl
18	194	98.5	255	1 US-08-509-261A-4	Sequence 4, Appl
19	194	98.5	255	1 US-08-660-626-10	Sequence 10, Appl
20	194	98.5	255	1 US-08-692-892-4	Sequence 4, Appl
21	194	98.5	255	2 US-08-713-939A-4	Sequence 4, Appl
22	194	98.5	255	2 US-08-868-162A-24	Sequence 24, Appl
23	194	98.5	255	3 US-09-031-168-10	Sequence 10, Appl
24	194	98.5	255	3 US-09-036-579-4	Sequence 4, Appl
25	194	98.5	255	3 US-09-550-374-4	Sequence 4, Appl
26	194	98.5	255	4 US-09-943-906-4	Sequence 10, Appl
27	194	98.5	255	4 US-09-669-516C-10	Sequence 10, Appl

28	194	98.5	256	4 US-09-431-887-25	Sequence 25, Appl
29	194	98.5	256	4 US-09-431-887-28	Sequence 28, Appl
30	194	98.5	264	4 US-09-431-887-27	Sequence 27, Appl
31	193	98.0	245	4 US-09-431-887-5	Sequence 5, Appl
32	193	98.0	245	4 US-09-431-887-15	Sequence 15, Appl
33	193	98.0	252	4 US-09-431-887-17	Sequence 17, Appl
34	193	98.0	253	4 US-09-431-887-3	Sequence 3, Appl
35	193	98.0	253	4 US-09-431-887-7	Sequence 7, Appl
36	193	98.0	253	4 US-09-431-887-9	Sequence 9, Appl
37	193	98.0	253	4 US-09-431-887-10	Sequence 10, Appl
38	193	98.0	253	4 US-09-431-887-11	Sequence 11, Appl
39	193	98.0	253	4 US-09-431-887-12	Sequence 12, Appl
40	193	98.0	253	4 US-09-431-887-14	Sequence 14, Appl
41	193	98.0	253	4 US-09-431-887-16	Sequence 16, Appl
42	193	98.0	254	4 US-09-431-887-18	Sequence 18, Appl
43	193	98.0	254	1 US-08-242-188-1	Sequence 1, Appl
44	193	98.0	254	1 US-08-509-261A-1	Sequence 1, Appl
45	193	98.0	254	1 US-08-660-626-7	Sequence 7, Appl

ALIGNMENTS

RESULT 1
US-09-380-015B-2
Sequence 2, Application US/09380015B
Patent No. 6765088
GENERAL INFORMATION:
APPLICANT: Carsten Korth
TITLE OF INVENTION: Immunological Detection of prions
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSER: Kanton Zuerich vertreten durch die Erziehungsdirektion
STREET: Walchetur
CITY: Zuerich
STATE: Zuerich
COUNTRY: Switzerland
ZIP: CH-8090
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/380,015B
FILING DATE: 23-Aug-1999
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 97102837.8
FILING DATE: 21-FEB-1997
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 219 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Bos taurus
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-380-015B-2
Query Match 100.0%; Score 197; DB 4; Length 219;
Best Local Similarity 100.0%; Pred. No. 1,8e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 RPVDQYSNONFVHDCVNTVKEHTVTTTKGENFT 36
DB 152 RPVDQYSNONFVHDCVNTVKEHTVTTTKGENFT 187
RESULT 2

US-08-242-188-3
; Sequence 3, Application US/08242188
; Patent No. 5565186
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
; TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Karl Bosicevic
; STREET: 2200 Sand Hill Road
; CITY: Menlo Park
; STATE: CA
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/242,188
; FILING DATE: 13-MAY-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Bosicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 06510/014001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 854-5277
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: BOVINE PRION PROTEIN, BobPr
US-08-242-188-3
Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 36
Db 174 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 209
RESULT 3
US-08-509-261A-3
; Sequence 3, Application US/08509261A
; Patent No. 5763244
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Scott, Michael R.
; APPLICANT: Telling, Glenn
; TITLE OF INVENTION: Method of Detecting Prions
; TITLE OF INVENTION: in a Sample and Transgenic Animal used fore
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bozicevic & Reed, LLP
; STREET: 285 Hamilton Avenue, Suite 200
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94301
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Pastero for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/509,261A
; FILING DATE: 31-JUL-1995
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Bozicevic, Karl
; REGISTRATION NUMBER: 28,807
; REFERENCE/DOCKET NUMBER: 6510-030001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-327-3400
; TELEFAX: 650-327-3231
; TELEX:
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-509-261A-3
Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Oy 1 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 36
Db 174 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 209
RESULT 4
US-08-660-626-9
; Sequence 9, Application US/08660626
; Patent No. 5789655
; GENERAL INFORMATION:
; APPLICANT: Stanley B. Prusiner
; APPLICANT: Glenn C. Telling
; APPLICANT: Fred E. Cohen
; APPLICANT: Michael R. Scott
; TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
; TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Fish & Richardson
; STREET: 2200 Sand Hill Road, Suite 100
; CITY: Menlo Park
; STATE: California
; COUNTRY: USA
; ZIP: 94025
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Ascii
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/660,626
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Valela Gregg
; REGISTRATION NUMBER: 35,127
; REFERENCE/DOCKET NUMBER: 07532/003001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (415) 322-5070
; TELEFAX: (415) 854-0875
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 263 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-660-626-9

Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 5:
US-08-692-892-3
Sequence 3, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-692-892-3

Query Match 100.0%; Score 197; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 6
US-08-713-939A-3

Sequence 3, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williams, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-3

Query Match 100.0%; Score 197; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 7
US-08-868-162A-23
Sequence 23, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868,162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-868-162A-23

Query Match 100.0%; Score 197; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTKGENFT 36
DB 174 RPVDQYSNQNNFVHDCVNITVKEHTVTTTKGENFT 209

RESULT 8
US-09-031-168-9
Sequence 9, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Teelling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: PC floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascti
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031,168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-09-031-168-9

Query Match 100.0%; Score 197; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTKGENFT 36
DB 174 RPVDQYSNQNNFVHDCVNITVKEHTVTTTKGENFT 209

RESULT 9
US-09-036-579-3
Sequence 3, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSER: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036,579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-3

Query Match 100.0%; Score 197; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 10
US-09-550-374-3
Sequence 3, Application US/09550374
Patent No. 6372214

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/550,374
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/036,579
FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-550-374-3

Query Match 100.0%; Score 197; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 11
US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. 6562341

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match 100.0%; Score 197; DB 4; Length 263;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGENFT 209

RESULT 12
US-09-669-516C-9
Sequence 9, Application US/09669516C
Patent No. 6602672

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Telling, Glenn C.
APPLICANT: Cohen, Fred E.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: RECOMBINANT CONSTRUCT ENCODING EPI TOPE
TITLE OF INVENTION: TAGGED PrP PROTEIN
FILE REFERENCE: UCAL-045CON
CURRENT APPLICATION NUMBER: US/09/669,516C
CURRENT FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: 09/031,168
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 08/660,626
PRIOR FILING DATE: 1996-06-06
PRIOR APPLICATION NUMBER: 08/521,992
PRIOR FILING DATE: 1995-08-31
PRIOR APPLICATION NUMBER: 08/509,261
PRIOR FILING DATE: 1995-07-31
PRIOR APPLICATION NUMBER: 08/242,188
PRIOR FILING DATE: 1994-05-13
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 9
LENGTH: 263
TYPE: PrP

ORGANISM: bovine sp.
US-09-669-516C-9

Query Match 100.0%; Score 197; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 36
174 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 209

RESULT 13
US-09-128-450-21
Sequence 21, Application US/09128450
Patent No. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-128-450-21

Query Match 100.0%; Score 197; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 36
175 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 210

RESULT 14
US-09-823-494-21
Sequence 21, Application US/09823494
Patent No. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susele
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-823-494-21

Query Match 100.0%; Score 197; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 36

Db 175 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 210

RESULT 15
US-09-431-887-24
Sequence 24, Application US/09431887
Patent No. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-431-887-24

Query Match 100.0%; Score 197; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 2.3e-19;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 36
175 RPVDQYNNNNFVHDCVNIIVKEHTVTTTGGENFT 210

Search completed: December 3, 2004, 00:18:59
Job time : 13.6328 secs

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 42.6098 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_214
Perfect score: 197
Sequence: 1 RPYDQYSNONNPFVHDCVITVKEHTVTTTKGENFT 36

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356623098 residues
Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

Published Applications AA:*
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15: /cgn2_6/ptodata/1/pubppa/US10C_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubppa/US10D_PUBCOMB.pep:*
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19: /cgn2_6/ptodata/1/pubppa/US60_NEW_PUB.pep:*
20: /cgn2_6/ptodata/1/pubppa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	197	100.0	117	14	US-10-050-902-349
2	197	100.0	117	14	US-10-050-902-349
3	197	100.0	117	14	US-10-050-902-349
4	197	100.0	117	14	US-10-346-190-90
5	197	100.0	161	9	US-09-745-003-9
6	197	100.0	256	13	US-10-109-551-2
7	197	100.0	256	16	US-10-479-218-3
8	197	100.0	263	9	US-09-943-906-3
9	197	100.0	263	14	US-10-435-602-3
10	197	100.0	264	9	US-09-823-494-21
11	197	100.0	264	14	US-10-209-194-2
12	197	100.0	264	14	US-10-355-780-11
13	197	100.0	264	14	US-10-304-630-24

14	197	100.0	264	14	US-10-301-488A-33	Sequence 33, Appl
15	197	100.0	264	14	US-10-410-907A-13	Sequence 80, Appl
16	197	100.0	264	14	US-10-346-190-80	Sequence 13, Appl
17	197	100.0	264	14	US-10-417-964A-19	Sequence 19, Appl
18	197	100.0	264	15	US-10-301-448-30	Sequence 30, Appl
19	197	100.0	264	15	US-10-301-448-33	Sequence 33, Appl
20	197	100.0	264	16	US-10-479-218-2	Sequence 2, Appl
21	194	98.5	255	9	US-09-943-906-4	Sequence 4, Appl
22	194	98.5	255	14	US-10-435-602-4	Sequence 4, Appl
23	194	98.5	256	13	US-10-109-551-4	Sequence 25, Appl
24	194	98.5	256	14	US-10-304-630-25	Sequence 28, Appl
25	194	98.5	256	14	US-10-304-630-28	Sequence 12, Appl
26	194	98.5	256	14	US-10-410-907A-12	Sequence 81, Appl
27	194	98.5	256	14	US-10-346-190-81	Sequence 81, Appl
28	194	98.5	256	14	US-10-346-190-88	Sequence 88, Appl
29	194	98.5	256	16	US-10-479-218-1	Sequence 1, Appl
30	194	98.5	256	16	US-10-479-218-4	Sequence 4, Appl
31	194	98.5	256	16	US-10-479-218-5	Sequence 5, Appl
32	194	98.5	256	16	US-10-479-218-6	Sequence 6, Appl
33	194	98.5	256	16	US-10-479-218-7	Sequence 7, Appl
34	194	98.5	256	16	US-10-479-218-8	Sequence 8, Appl
35	194	98.5	256	16	US-10-479-218-9	Sequence 9, Appl
36	194	98.5	256	16	US-10-479-218-10	Sequence 10, Appl
37	194	98.5	256	16	US-10-479-218-11	Sequence 11, Appl
38	194	98.5	256	16	US-10-479-218-12	Sequence 12, Appl
39	194	98.5	256	16	US-10-479-218-13	Sequence 13, Appl
40	194	98.5	256	16	US-10-479-218-14	Sequence 14, Appl
41	194	98.5	256	16	US-10-479-218-18	Sequence 18, Appl
42	194	98.5	256	16	US-10-479-218-19	Sequence 19, Appl
43	194	98.5	256	16	US-10-479-218-20	Sequence 20, Appl
44	194	98.5	264	14	US-10-304-630-27	Sequence 27, Appl
45	193	98.0	124	14	US-10-050-902-324	Sequence 324, App

ALIGNMENTS

RESULT 1
US-10-050-902-349
Sequence 349, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seibel, Peter
APPLICANT: Plossek, Christine
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-902-349
Query Match 100.0%; Score 197; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-18;

Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 43 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 78

RESULT 2

US-10-050-898-349
Sequence 349, Application US/10050898
Publication No. US20030175711A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tisroc, Alain
APPLICANT: Maurer, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Seidel, Peter
APPLICANT: Plosser, Christine
APPLICANT: Ortman, Rainer
APPLICANT: Luond, Rainer
APPLICANT: Staufenbiel, Matthias
APPLICANT: Frey, Peter
TITLE OF INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.0190005
CURRENT APPLICATION NUMBER: US/10/050,898
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-898-349

Query Match 100.0%; Score 197; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 43 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 78

RESULT 3

US-10-346-190-90
Sequence 90, Application US/10346190
Publication No. US20030219459A1
GENERAL INFORMATION:
APPLICANT: Bachmann, Martin
APPLICANT: Maurer, Patrick
APPLICANT: Pelliccioli, Erica
APPLICANT: Renner, Wolfgang A.
TITLE OF INVENTION: Prion Protein Carrier-Conjugates
FILE REFERENCE: 1700.0290003
CURRENT APPLICATION NUMBER: US/10/346,190
CURRENT FILING DATE: 2003-01-17
PRIOR APPLICATION NUMBER: 60/396,590
PRIOR FILING DATE: 2002-07-18
PRIOR APPLICATION NUMBER: 60/393,725
PRIOR FILING DATE: 2002-07-08
PRIOR APPLICATION NUMBER: 60/389,898
PRIOR FILING DATE: 2002-06-20

PRIOR APPLICATION NUMBER: PCT/IB02/00166
PRIOR FILING DATE: 2002-01-21
PRIOR APPLICATION NUMBER: 10/050,902
PRIOR FILING DATE: 2002-01-18
NUMBER OF SEQ ID NOS: 164
SOFTWARE: Patentin version 3.1
SEQ ID NO 90
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified Bovine Prion Protein Fragment
US-10-346-190-90

Query Match 100.0%; Score 197; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 43 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 78

RESULT 4

US-09-745-003-9
Sequence 9, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 9
LENGTH: 161
TYPE: PRT
ORGANISM: bovine
US-09-745-003-9

Query Match 100.0%; Score 197; DB 9; Length 161;
Best Local Similarity 100.0%; Pred. No. 2.3e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 36
Db 72 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGENFT 107

RESULT 5

US-10-109-551-2
Sequence 2, Application US/10109551
Publication No. US20020194635A1
GENERAL INFORMATION:
APPLICANT: DUNNE, PATRICK W.
APPLICANT: PIEDRAHITA, JORGE
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
TITLE OF INVENTION: SPONGIFORM ENCEPHALOPATHIES
FILE REFERENCE: TAMK:20705
CURRENT APPLICATION NUMBER: US/10/109,551
CURRENT FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: 60/280,549
PRIOR FILING DATE: 2001-03-30
NUMBER OF SEQ ID NOS: 10
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
LENGTH: 256
TYPE: PRT
ORGANISM: Bos taurus
US-10-109-551-2

Query Match 100.0%; Score 197; DB 13; Length 256;

Best Local Similarity 100.0%; Pred. No. 3.8e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 167 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 202

RESULT 6

US-10-479-218-3
Sequence 3, Application US/10479218
Publication No. US20040171082A1

GENERAL INFORMATION:
APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)

APPLICANT: Jeffrey, Martin
TITLE OF INVENTION: Diagnostic method

FILE REFERENCE: CG/P/135/MOD
CURRENT APPLICATION NUMBER: US/10/479,218

CURRENT FILING DATE: 2003-12-01
PRIOR APPLICATION NUMBER: GB 0113156.4

PRIOR FILING DATE: 2001-05-31
NUMBER OF SEQ ID NOS: 20

SOFTWARE: Patent version 3.1
SEQ ID NO 3

LENGTH: 256
TYPE: PRT

ORGANISM: Ovis aries
US-10-479-218-3

Query Match 100.0%; Score 197; DB 16; Length 256;
Best Local Similarity 100.0%; Pred. No. 3.8e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 167 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 202

RESULT 7

US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. US20020150571A1

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road

CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.

ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374

FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid

STRANDEDNESS: single
TOPOLOGY: linear

MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:

Query Match 100.0%; Score 197; DB 9; Length 263;
Best Local Similarity 100.0%; Pred. No. 3.9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 174 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 209

RESULT 8

US-10-435-602-3
Sequence 3, Application US/10435602
Publication No. US20030228303A1

GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony

APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: Antibodies Specific for Native PrP^{Sc}
FILE REFERENCE: UCAL059CON3

CURRENT APPLICATION NUMBER: US/10/435,602
CURRENT FILING DATE: 2003-05-09

PRIOR APPLICATION NUMBER: 09/943,906
PRIOR FILING DATE: 2001-08-30

PRIOR APPLICATION NUMBER: 09/550,374
PRIOR FILING DATE: 2000-04-13

PRIOR APPLICATION NUMBER: 09/036,579
PRIOR FILING DATE: 1998-03-06

PRIOR APPLICATION NUMBER: 08/713,939
PRIOR FILING DATE: 1996-09-13

PRIOR APPLICATION NUMBER: 08/528,104
PRIOR FILING DATE: 1995-09-14

NUMBER OF SEQ ID NOS: 86
SOFTWARE: FastSeq for Windows Version 4.0

SEQ ID NO 3
LENGTH: 263

TYPE: PRT
ORGANISM: bovine

US-10-435-602-3
Query Match 100.0%; Score 197; DB 14; Length 263;
Best Local Similarity 100.0%; Pred. No. 3.9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 36
Db 174 RPVDQYNNNNFVHDCNITVKEHTVTTTGGENFT 209

RESULT 9

US-09-823-494-21
Sequence 21, Application US/09823494
Publication No. US20010041790A1

GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
Caughy, Byron W

APPLICANT: Chabry, Joelle
Piola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494

```

; CURRENT FILING DATE: 2001-03-30
; PRIOR APPLICATION NUMBER: 09/128,450
; PRIOR FILING DATE: 1998-08-03
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 21
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Bos taurus
; US-09-823-494-21

Query Match      100.0%; Score 197; DB 9; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 210

RESULT 10
US-10-209-194-2
; Sequence 2, Application US/10209194
; Publication No. US20030051264A1
; GENERAL INFORMATION:
; APPLICANT: LILIEDAHL, MONIKA
; APPLICANT: ASPLAND, SIMON ERIC
; TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED
; FILE REFERENCE: BIOBANK.007A
; CURRENT FILING DATE: 2002-07-29
; PRIOR APPLICATION NUMBER: 60/309,222
; PRIOR FILING DATE: 2001-07-31
; PRIOR APPLICATION NUMBER: 60/367,091
; PRIOR FILING DATE: 2002-03-21
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 24
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Bos Taurus
; US-10-209-194-2

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 210

RESULT 11
US-10-355-780-11
; Sequence 11, Application US/10355780
; Publication No. US20030143224A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley
; APPLICANT: Safar, Jiri
; APPLICANT: Williamson, Anthony
; APPLICANT: Burton, Dennis
; TITLE OF INVENTION: Antibodies Specific for Ungulate PrP
; FILE REFERENCE: UCAL-194
; CURRENT FILING DATE: 2003-01-30
; PRIOR APPLICATION NUMBER: US/09/627,218B
; PRIOR FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO: 11
; LENGTH: 264
; TYPE: PRT
```

```

; ORGANISM: Bos taurus
; US-10-355-780-11

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 174 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 209

RESULT 12
US-10-304-630-24
; Sequence 24, Application US/10304630
; Publication No. US20030161836A1
; GENERAL INFORMATION:
; APPLICANT: D-Gen Limited
; TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
; FILE REFERENCE: ICOT/P21952
; CURRENT FILING DATE: 2002-11-26
; PRIOR APPLICATION NUMBER: US/09/431,887
; PRIOR FILING DATE: 1999-11-02
; PRIOR APPLICATION NUMBER: GB 9824091.4
; PRIOR FILING DATE: 1999-11-04
; NUMBER OF SEQ ID NOS: 37
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO: 24
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Bos taurus
; US-10-304-630-24

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 36
DB 175 RPVDQSNQNNFVHDCVNTVKEHTVTTTGGENFT 210

RESULT 13
US-10-301-488A-30
; Sequence 30, Application US/10301488A
; Publication No. US2003016558A1
; GENERAL INFORMATION:
; APPLICANT: FRANGIONE, Blas
; APPLICANT: WISNIEWSKI, Thomas
; APPLICANT: SIGURDSSON, Einar
; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN, AN
; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
; FILE REFERENCE: 5986/1K434US1
; CURRENT FILING DATE: 2002-11-21
; PRIOR APPLICATION NUMBER: US/10/301,488A
; PRIOR FILING DATE: 2001-11-21
; NUMBER OF SEQ ID NOS: 55
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 30
; LENGTH: 264
; TYPE: PRT
; ORGANISM: Cow
; US-10-301-488A-30

Query Match      100.0%; Score 197; DB 14; Length 264;
Best Local Similarity 100.0%; Pred. No. 3,9e-18;
Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

QY 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTNGENFT 36
 |||
 Db 175 RPVDQYNNNNFVHDCVNITVKEHTVTTTNGENFT 210

RESULT 14
 US-10-301-488A-33

; Sequence 33, Application US/10301488A
 ; Publication No. US2003016558A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FRANGIONE, Blas
 ; APPLICANT: WISNIEWSKI, Thomas
 ; APPLICANT: SIGUIDSSON, Einar
 ; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 ; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
 ; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 ; TITLE OF INVENTION: IMMUNE RESPONSE THERETO
 ; FILE REFERENCE: 5986/1K434US1
 ; CURRENT APPLICATION NUMBER: US/10/301,488A
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 60/331,801
 ; PRIOR FILING DATE: 2001-11-21
 ; NUMBER OF SEQ ID NOS: 55
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 33
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (132)..(133)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; US-10-301-488A-33

Query Match 100.0%; Score 197; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 3.9e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTNGENFT 36
 |||
 Db 175 RPVDQYNNNNFVHDCVNITVKEHTVTTTNGENFT 210

RESULT 15
 US-10-410-907A-13

; Sequence 13, Application US/10410907A
 ; Publication No. US20030215880A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dennis R. Burton
 ; APPLICANT: R. Anthony Williamson
 ; APPLICANT: Gianluca Moroncini
 ; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
 ; TITLE OF INVENTION: USES THEREOF
 ; FILE REFERENCE: 22908-1229
 ; CURRENT APPLICATION NUMBER: US/10/410,907A
 ; CURRENT FILING DATE: 2003-04-08
 ; PRIOR APPLICATION NUMBER: 60/371,610
 ; PRIOR FILING DATE: 2002-04-09
 ; NUMBER OF SEQ ID NOS: 36
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 13

; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Bos taurus (bovine)
 ; US-10-410-907A-13

Query Match 100.0%; Score 197; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 3.9e-18;
 Matches 36; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTNGENFT 36
 |||
 Db 175 RPVDQYNNNNFVHDCVNITVKEHTVTTTNGENFT 210

Search completed: December 3, 2004, 01:07:49
 Job time : 43.6098 secs

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site, where the antigen or antigenic determinant is amyloid beta peptide (Abeta1-42) or its fragment and where the second attachment site is selected from an attachment site not naturally occurring with the antigen or antigenic determinant and an attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site and where the association to form an ordered and scaffold interact through the association to form an ordered and scaffold antigen array. The invention also comprises a coat protein capable of forming a capsid which comprises mutant beta coat sequences having an amino acid sequence selected from five amino acid sequences fully defined in the specification. The compounds of the invention may have antimicrobial, antiallergic, immunomodulatory, cytostatic, antiviral, antidiabetic, or hypoglycaemic activities and may be used in immunisation and as a vaccine. The present sequence represents a protein sequence used to create the compositions of the invention. (Updated on 06 -AUG-2003 to correct OS field.)

CC Sequence 117 AA;

Query Match 100.0%; Score 217; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 7.4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGKNTETDI 40
ID 43 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGKNTETDI 82

ABG80670 standard; protein; 117 AA.

ABG80670;

29-NOV-2002 (first entry)

Bovine prion protein/cysteine-containing peptide fusion protein.

Molecular antigen array; vaccine; antigen; antimicrobial; mutant; molecular scaffold; amyloid beta; Abeta 1-42; influenza; mutant; graft versus host disease; IGE-mediated allergic reaction; anaphylaxis; adult respiratory distress syndrome; ARDS; Crohn's disease; allergic asthma; acute lymphoblastic leukemia; non-Hodgkin's lymphoma; Grave's disease; systemic lupus erythematosus; osteoporosis; inflammatory immune disease; myasthenia gravis; multiple sclerosis; immunoproliferative disease lymphadenopathy; Alzheimer's disease; angioimmunoproliferative lymphadenopathy; immunoblastic lymphadenopathy; rheumatoid arthritis; diabetes; infectious disease; factor Xa; enterokinase; cysteine-containing linker.

Bos taurus.
Synthetic.

MO200256907-A2.

25-JUN-2002.

21-JAN-2002; 2002WO-1B000168.

19-JAN-2001; 2001US-0262379P.

04-MAY-2001; 2001US-0288549P.

05-OCT-2001; 2001US-0326989P.

07-NOV-2001; 2001US-0331045P.

(CYTO-) CYTOS BIOTECHNOLOGY AG.

(NOVA) NOVARTIS PHARMA AG.

(MAUR) MAURER P.

(LECH) LECHNER F.

(ORTM) ORTMANN R.

(LUBO) LUBOEND R.

(STAU) STAUENBIEL M.

(FREY) FREY P.

XX Maurer P, Lechner F, Ortman R, Luboend R, Staufenbiel M, Frey P;
PI Renner WA, Bachmann M, Tiesot A, Seibel P, Plosek C;
XX WPI; 2002-636514/68.

PT Molecular antigen array used in the production of vaccines for infectious diseases.

PS Disclosure; Page 418; 418pp; English.

The invention relates to a composition comprising: (a) a non-natural attachment site naturally occurring with the antigen or antigenic determinant, where the second attachment site is capable of association through at least one non-peptide bond to the first attachment site; and where the antigen or antigenic determinant and the scaffold interact through the association to form an ordered and repetitive antigen array. Also included is a process for producing a non-naturally occurring ordered and repetitive antigen array. The composition is used in immunisation and as a vaccine for diseases such as influenza, graft versus host disease, IGE-mediated allergic reactions, anaphylaxis, adult respiratory distress syndrome (ARDS), Crohn's disease, allergic asthma, acute lymphoblastic leukemia, non-Hodgkin's lymphoma, Grave's disease, systemic lupus erythematosus, inflammatory immune diseases, myasthenia gravis, immunoproliferative disease lymphadenopathy, angioimmunoproliferative lymphadenopathy, immunoblastic lymphadenopathy, rheumatoid arthritis, diabetes, multiple sclerosis, Alzheimer's disease, osteoporosis and infectious diseases. The present sequence is a modified antigen for use in the array of the invention. The antigen is modified to possess a cleavage site (enterokinase or factor Xa) and a Cysteine-containing N- or C-terminal linker peptide which serves as the attachment point to a virus like particle or bacterial protein (the scaffold protein).

Sequence 117 AA;

Query Match 100.0%; Score 217; DB 5; Length 117;
Best Local Similarity 100.0%; Pred. No. 7.4e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGKNTETDI 40
ID 43 RPVDQYSNONNFVHDCVNTVKEHTVTTTGGKNTETDI 82

ADD24197 standard; protein; 117 AA.

ADD24197;

15-JUN-2004 (first entry)

Modified bovine prion protein amino acid sequence.

vaccine composition; virus-like particle; core particle;

first attachment site; antigen; antigenic determinant; prion protein;

PrP; PrP peptide; vaccine; neuroprotective; antiinflammatory;

Creutzfeldt-Jakob Disease; prion.

Synthetic.

prion.

PN WO2003059386-A2.
 XX
 PD 24-JUL-2003.
 XX
 PF 17-JAN-2003; 2003WO-EP000460.
 XX
 PR 18-JAN-2002; 2002US-00050902.
 PR 21-JAN-2002; 2002WO-1B000166.
 PR 08-JUL-2002; 2002US-0393725P.
 PR 18-JUL-2002; 2002US-0396590P.
 XX
 PA (CYTO-) CYTOS BIOTECHNOLOGY AG.
 XX
 PI Bachmann M, Maurer P, Pelliccioli E, Renner WA;
 XX WPI; 2003-598483/56.
 XX
 PT A vaccine composition for preventing or treating prion diseases (e.g.
 PT Creutzfeldt-Jakob Disease) comprises a virus-like particle (e.g. RNA-
 PT phase) and at least one prion protein or peptide bound to the virus-like
 PT particle.
 XX
 PS Disclosure; SEQ ID NO 90; 246pp; English.
 XX
 CC This invention relates to a novel vaccine composition comprising a virus-
 CC like or a core particle with at least one first attachment site and at
 CC least one antigen or antigenic determinant that is a prion protein (PrP)
 CC or its dimer, or a PrP peptide, the antigen or antigenic determinant
 CC being bound to the virus-like or core particle. The vaccine of the
 CC invention may have neuroprotective or antiinflammatory activity. The
 CC composition is useful as a medicament or in manufacturing a medicament
 CC for the treatment or prevention of prion diseases. The prion diseases may
 CC include Bovine Spongiform Encephalopathy (BSE) or Creutzfeldt-Jakob
 CC Disease. The present sequence is the amino acid sequence of a modified
 CC bovine prion protein (PrP) which may be used during the creation of the
 CC vaccine composition of the invention.
 CC
 XX Sequence 117 AA;
 SQ
 Query Match 100.0%; Score 217; DB 7; Length 117;
 Best Local Similarity 100.0%; Pred. No. 7.4e-21;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 RPVDQYSNQNPFVHDCVNTVKEHTVTTTGGNFETDI 40
 DB 43 RPVDQYSNQNPFVHDCVNTVKEHTVTTTGGNFETDI 82
 XX
 RESULT 4
 AAB07317
 ID AAB07317 standard; protein; 217 AA.
 XX
 AC AAB07317;
 XX
 DT 12-SEP-2003 (revised)
 DT 17-OCT-2000 (first entry)
 XX
 DE Cattle prion protein sequence.
 XX
 KM Cattle; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 OS Bos taurus.
 XX
 FH Key Location/Qualifiers
 FH Region 37..79
 FT /note= "Repeat region consisting of tandem repeats of
 FT Disulfide-bond 166..201 repeat unit: PHGGGWGQ (AAB07319)"
 FT Modified-site 217
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX

PN WO200029850-A1.
 XX
 PD 25-MAY-2000.
 XX
 PF 27-OCT-1999; 99WO-FI000897.
 XX
 PR 17-NOV-1998; 98FI-00002481.
 XX
 PA (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX
 PI Hope J, Barnard GJR, Birkett CR;
 XX WPI; 2000-387880/33.
 XX
 PT Novel immunoassay for prion protein, used for the determination of
 PT transmissible spongiform encephalopathies in bovines.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease (CJD)
 CC and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates BSE. PrP
 CC epitopes (AAB07320-B07326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 CC
 XX Sequence 217 AA;
 SQ
 Query Match 100.0%; Score 217; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 RPVDQYSNQNPFVHDCVNTVKEHTVTTTGGNFETDI 40
 DB 151 RPVDQYSNQNPFVHDCVNTVKEHTVTTTGGNFETDI 180
 XX
 RESULT 5
 AAB07328
 ID AAB07328 standard; protein; 217 AA.
 XX
 AC AAB07328;
 XX
 DT 12-SEP-2003 (revised)
 DT 17-OCT-2000 (first entry)
 XX
 DE Cattle prion protein sequence.
 XX
 KM Cattle; prion protein; transmissible spongiform encephalopathy;
 KM bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 OS Bos taurus.
 XX
 FH Key Location/Qualifiers
 FH Region 37..79
 FT /note= "Repeat region consisting of tandem repeats of
 FT Disulfide-bond 166..201 repeat unit: PHGGGWGQ (AAB07319)"
 FT Modified-site 217
 FT /note= "C-terminal phospho-inositol glycolipid membrane
 FT anchor (-GPI)"
 XX
 PD WO200029849-A1.
 XX 25-MAY-2000.
 XX

PF 27-OCT-1999; 99WO-FI000896.
 XX 17-NOV-1998; 98RI-00002480.
 XX (WALL-) WALLAC OY.
 PA (BBSR-) BBSRC OFFICE.
 XX Hope J, Barnard GJR, Birkett CR;
 PI WPI; 2000-399778/34.
 XX
 DR New immunosassay for prion protein, used for determination of
 PT transmissible spongiform encephalopathies in mammals, comprises specific
 PT capture antibody.
 XX
 PS Disclosure; Page 42-43; 50pp; English.
 XX
 CC The present sequence is the cattle prion protein (PrP) sequence.
 CC Conversion of the normal cellular form of PrP into an aggregated,
 CC insoluble isoform is implicated in the pathogenesis of Transmissible
 CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
 CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jacob disease (CJD)
 CC and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration of
 CC this protein in body fluid or tissue samples may be measured by an assay
 CC of the present invention, in which a PrP epitope is captured by an
 CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 CC epitopes (AAB07320-807326) are derived from the protease resistant core
 CC of PrP that is occluded when the PrP is in an aggregated state. (Updated
 CC on 12-SEP-2003 to standardise OS field)
 XX
 SQ Sequence 217 AA;

Query Match 100.0%; Score 217; DB 3; Length 217;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNMFVHDCVNITVKEHTVTTTKGENFTETDI 40
 DB 151 RPVDQYSNQNMFVHDCVNITVKEHTVTTTKGENFTETDI 190

RESULT 6
 ID AAW70261 standard; protein; 219 AA.
 XX AAW70261;
 AC AAW70261;
 XX 13-NOV-1998 (first entry)
 DT Bovine prion protein.
 XX
 DE Bovine prion protein.
 XX
 KW Prion protein; PrP; cow; disease-specific prion protein; scrapie; Kuru;
 KM prion disease detection; bovine spongiform encephalopathy; therapy;
 KW Creutzfeldt-Jacob disease; Gerstmann-Strausler-Scheinker syndrome;
 KM Fatal Familial Insomnia.
 XX
 OS Bos taurus.
 XX
 PN EP861900-A1.
 PD 02-SEP-1998.
 PF 21-FEB-1997; 97EP-00102837.
 XX
 PR 21-FEB-1997; 97EP-00102837.
 XX
 PA (ER21-) ERZIEHUNGSDIREKTION CANTON ZURICH.
 XX
 PI Korzh C, Stierli B, Moser M, Streite P, Oesch B;
 XX WPI; 1998-449112/39.
 DR N-PSDB; AAV33005.
 XX

PT New monoclonal antibodies specifically bind to disease-specific prion
 PT proteins - used to diagnose, prevent and treat prion diseases e.g.
 PT bovine, spongiform encephalopathy, scrapie and Creutzfeldt-Jacob disease.
 XX
 PS Disclosure; Page 20-21; 35pp; English.
 XX

CC This sequence represents the bovine prion protein (PrP). The protein is
 CC targeted by the antibody of the invention, which is a monoclonal antibody
 CC or fragment capable of specifically binding to native and denatured
 CC normal (PrP^c) and disease-specific prion protein (PrP^{Sc}) in an antigen-
 CC antibody complex. The antibodies that immunoreact with disease-specific
 CC prion proteins are used in test kits for the diagnosis of prion diseases
 CC and to detect disease-specific PrP in biological material by treatment of
 CC a probe of the material with proteinase K and then with the monoclonal
 CC antibody. The monoclonal antibodies are used for the prevention and
 CC treatment of prion diseases and to clear biological material from prions.
 CC The antibodies are used to diagnose, treat and prevent e.g. bovine
 CC spongiform encephalopathy, scrapie in sheep and Creutzfeldt-Jacob
 CC disease, Gerstmann-Strausler-Scheinker syndrome, Fatal Familial Insomnia
 CC and Kuru in humans. The diagnostic method allows mass screening of
 CC infected cattle tissue at a subclinical stage and reduces possible human
 CC health risks
 XX
 SQ Sequence 219 AA;

Query Match 100.0%; Score 217; DB 2; Length 219;
 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNMFVHDCVNITVKEHTVTTTKGENFTETDI 40
 DB 152 RPVDQYSNQNMFVHDCVNITVKEHTVTTTKGENFTETDI 191

RESULT 7
 ID AAW93571 standard; protein; 219 AA.
 XX AAW93571;
 AC AAW93571;
 XX 17-JUN-1999 (first entry)
 DT Bovine rbPrP protein.
 XX
 DE Bovine rbPrP protein.
 XX
 KW Prion protein; PrP; rbPrP; disease specific isoform; PrP(Sc); vaccine;
 KM treatment; diagnosis; Scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;
 KM detection.
 XX
 OS Bos taurus.
 XX
 PN DE19741607-A1.
 PD 25-MAR-1999.
 PF 20-SEP-1997; 97DE-01041607.
 XX
 PR 20-SEP-1997; 97DE-01041607.
 XX
 PA (PRIO-) PRIONICS AG.
 PD Moser M, Oesch B, Korzh C;
 PI WPI; 1999-205964/18.
 DR
 XX New polypeptides comprising prion protein sequences - useful for
 PT diagnosis or treatment of prion diseases e.g. Scrapie, BSE and
 PT Creutzfeldt-Jacob disease.
 XX
 PS Claim 13; Page 6-7; 12pp; German.
 XX
 CC This invention describes a synthetic polypeptide comprising at least one
 CC "defined" PrP (prion protein) sequence or sequences derived therefrom
 CC that are recognised by a disease specific isoform of PrP, e.g. PrP(Sc),

CC binding substances. The new prion protein polypeptides are useful in
CC vaccines and pharmaceuticals for treatment of, and as diagnostic agents
CC for diagnosis of scrapie, BSE, Kuru and Creutzfeldt-Jacob disease. The
CC polypeptides are also useful in pharmaceutical or chemical libraries for
CC detection of PrP(Sc)-specific agents

SQ Sequence 219 AA;

Query Match 100.0%; Score 217; DB 2; Length 219;
Best Local Similarity 100.0%; Pred. No. 1.5e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGNFETDI 40
152 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGNFETDI 191

RESULT 8

ABP57900 ID ABP57900 standard; protein; 256 AA.

AC ABP57900;

DT 12-FBB-2003 (first entry)

DE Bovine BSE-resistant prion protein.

KM Transmissible spongiform encephalopathy; neuroprotective; prion protein;
KM bovine spongiform encephalopathy; transgenic; BSE; bovine; cervid; PrP;
KM TSE.

OS Bos taurus.

PN WO200279416-A2.

PD 10-OCT-2002.

PF 28-MAR-2002; 2002WO-US009652.

PR 30-MAR-2001; 2001US-0280549P.

PA (TEXA) UNIV TEXAS A & M SYSTEM.

PI Dunne PW, Piedrahita J;

DR WPI: 2003-092895/08.

DR N-PSDB; ABV99701.

PT New transgenic bovine and cervid useful for producing animals which are
PT resistant to bovine spongiform encephalopathy and transmissible
PT spongiform encephalopathy disease, comprise a transgene encoding a mutant
PT PrP polypeptide.

PS Claim 1; Fig 6; 98pp; English.

CC The invention relates to a novel transgenic bovine/cervid comprising a
CC transgene encoding a mutant prion protein (PrP) polypeptide, in which a
CC substitution has been made at position 171 of the sequence, which renders
CC the bovine/cervid resistant to bovine spongiform encephalopathy (BSE) and
CC transmissible spongiform encephalopathy (TSE) disease, respectively. The
CC transgene of the invention has neuroprotective activity. The method is
CC useful for producing a transgenic bovine or cervid resistant to BSE and
CC TSE diseases. The bovine prion gene is useful for producing transgenic
CC cattle exhibiting resistance to bovine spongiform encephalopathy. The
CC sequence represents the mutant bovine PrP polypeptide

SQ Sequence 256 AA;

Query Match 100.0%; Score 217; DB 6; Length 256;
Best Local Similarity 100.0%; Pred. No. 1.8e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 167 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGNFETDI 206

RESULT 9

AAR86716 ID AAR86716 standard; protein; 263 AA.

AC AAR86716;

DT 15-OCT-1996 (first entry)

DE Bovine prion protein, BoPrP.

KM Chimeric gene; chimeric prion; transgenic animal; diagnosis;
KM spongiform encephalopathy; PrP; central nervous system; CNS;
KM Creutzfeldt-Jacob disease; CJD; BSE.

OS Bos taurus.

PN WO9531466-A1.

PD 23-NOV-1995.

PF 10-APR-1995; 95WO-US004426.

PR 13-MAY-1994; 94US-00242188.

PA (REGC) UNIV CALIFORNIA.

PI Prusiner SB, Scott MR, Telling G;

DR WPI: 1996-010868/01.

PT Chimeric prion protein gene - for formation of a transgenic animal
PT susceptible to prion infection by prion(s) normally specific for a
PT different species.

PS Disclosure; Page 42-43; 65pp; English.

CC Pathogenic prions in a sample can be detected by injecting the sample to
CC be tested into a transgenic mouse. The mouse genome includes a chimeric
CC PrP gene in which the gene includes a portion of a gene of the animal
CC (e.g. cattle) in danger of infection from prions in the sample. Preferred
CC transgenic mice express a chimeric prion protein (PrP) in which a segment
CC of the mouse PrP, MoPrP, is replaced with the corresponding bovine PrP
CC sequence

SQ Sequence 263 AA;

Query Match 100.0%; Score 217; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGNFETDI 40
174 RPVDQYSNQNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 10

ID AAW69661 standard; protein; 263 AA.

AC AAW69661;

DT 25-MAR-2003 (revised)

DT 19-OCT-1998 (first entry)

DE Bovine prion protein BoPrP.

KM Bovine; cow; prion protein; PrP; transgenic animal; artificial gene;
KM Creutzfeldt Jakob disease; CJD; neurodegenerative disease; human.

QY

OS Bos sp.
 XX US5792901-A.
 XX 11-AUG-1998.
 XX 30-JUL-1996; 96US-00692892.
 XX 13-MAY-1994; 94US-00242188.
 PR 31-JUL-1995; 95US-00509261.
 PR 31-AUG-1995; 95US-00521992.
 XX (REGC) UNIV CALIFORNIA.
 XX Scott MR, Telling GC, Prusiner SB;
 XX WPI, 1998-456207/39.
 XX Transgenic mouse with altered PrP gene - for detecting disease-causing
 PT prions.
 XX Example 8; Fig 4; 37pp; English.

CC A transgenic mouse has been developed which comprises a genome in which
 CC both alleles of an endogenous PrP (prion protein) gene of the mouse are
 CC ablated, the genome containing operatively inserted all exogenous non-
 CC PrP gene. The mouse is susceptible to infection with prions which
 CC generally only infect a genetically diverse mammal due to the presence of
 CC the exogenous PrP gene and ablated endogenous PrP gene. It exhibits
 CC symptoms of prion disease within 200 days or less after inoculation with
 CC prions which generally only infect a genetically diverse mammal. Also
 CC described in the present invention are: (A) a method of producing the
 CC transgenic mouse; and (B) determining the presence of infectious prions
 CC in a sample obtained from a bovine. The transgenic mouse is used to
 CC detect for Creutzfeldt Jakob disease (CJD) a fatal neurodegenerative
 CC disease of humans caused by prions. The present sequence represents
 CC bovine prion protein (BoPrP) from the present invention. (Updated on 25-
 CC MAR-2003 to correct Pr field.)

SO Sequence 263 AA;

Query Match 100.0%; Score 217; DB 2; Length 263;
 Best Local Similarity 100.0%; Pred. No. 1.9e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETTDI 40
 DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETTDI 213

RESULT 11

AAW85902
 ID AAW85902 standard; peptide; 263 AA.

AC AAW85902;

DT 12-FEB-1999 (first entry)

DE Bovine prion protein (PrP) sequence.

XX PrP; PrP(Sc); scrapie; isoform; antibody; prion; CJD; screening;
 KW Creutzfeldt-Jakob disease; infectivity; assay; pharmaceutical; food;
 KW cosmetic; therapeutic; bovine.

OS Bos sp.

XX US5846533-A.

PD 08-DEC-1998.

PF 13-SEP-1996; 96US-00713939.

PR 14-SEP-1995; 95US-00528104.

XX (REGC) UNIV CALIFORNIA.
 PA (SCRI) SCRIPPS RES INST.
 XX Prusiner SB, Williamson RA, Burton DR;
 XX WPI, 1999-058996/05.
 PT Antibody specific for scrapie isoform of prion protein - useful for
 PT diagnosis and therapy.
 XX Disclosure; Col 43-44; 58pp; English.

CC This represents a bovine prion protein (PrP) sequence. The invention
 CC relates to an antibody that is capable of binding to native PrP(Sc), the
 CC scrapie isoform of PrP. The antibody is produced by a method that
 CC comprises synthesizing a library of antibodies on phages, contacting the
 CC phages with a composition containing PrP protein, isolating phages that
 CC bind to native PrP(Sc) in situ, obtaining an antibody from the phages,
 CC and optionally analysing the phages to determine a nucleic acid sequence
 CC encoding an amino acid sequence to which the native PrP(Sc) binds. The
 CC antibody is used to detect disease-associated PrP, especially in
 CC Creutzfeldt-Jakob disease (CJD) and distinguish it from normal PrP. They
 CC can also be used to neutralise the infectivity of PrP(Sc). Assays using
 CC the antibodies can be used to screen for disease-associated PrP in
 CC pharmaceutical products, foods and cosmetics or for therapeutic purposes

SO Sequence 263 AA;

Query Match 100.0%; Score 217; DB 2; Length 263;
 Best Local Similarity 100.0%; Pred. No. 1.9e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETTDI 40
 DB 174 RPVDQYSNONNFVHDCVNITVKEHTVTTTGGNFETTDI 213

RESULT 12

AAW65854
 ID AAW65854 standard; protein; 263 AA.

AC AAW65854;

DT 11-FEB-2002 (first entry)

DE Bovine prion protein (PrP) sequence.

XX PrP; prion protein; Creutzfeldt-Jakob disease; familial insomnia; PrP-Sc;
 KW scrapie; Gerstmann-Strassler-Scheinker disease.

OS Bos sp.

FN US6290954-B1.

PD 18-SEP-2001.

PF 06-MAR-1998; 98US-00036579.

PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713939.

PA (SCRI) SCRIPPS RES INST.

PI Prusiner SB, Williamson RA, Burton DR;

DR WPI, 2001-637939/73.

PT Detecting a scrapie isoform of the prion protein (PrP-Sc) in a source,
 PT particularly useful for detecting e.g. Creutzfeldt-Jakob disease or
 PT Gerstmann-Strassler-Scheinker disease, by contacting the source with PrP-
 SC antibodies.

PS Disclosure; Fig 3; 58pp; English.

XX The invention provides a method for detecting a scrapie isoform of the

CC prion protein (PrP-Sc) in a source. The method involves contacting the

CC source suspected of containing native PrP-Sc with a diagnostic amount of

CC an antibody characterized by its ability to bind to native PrP-Sc in

CC situ. The method is useful for detecting PrP-Sc in a source, which is

CC particularly useful for detecting Creutzfeldt-Jakob disease, fatal

CC familial insomnia or Gerstmann-Sträussler-Scheinker disease. The present

CC sequence represents the bovine PrP sequence

XX

SO Sequence 263 AA;

Query Match 100.0%; Score 217; DB 4; Length 263;

Best Local Similarity 100.0%; Pred. No. 1.9e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 13

ABP51788

XX ABP51788 standard; protein; 263 AA.

XX

AC ABP51788;

XX

DT 03-OCT-2002 (first entry)

XX

DE Bovine prion protein (PrP) SEQ ID NO:3.

XX

KW Prion protein; PrP; scrapie; PrPSc; prion disease; immunoassay;

KM detection.

XX

OS Bos sp.

XX

PN US6372214-B1.

XX

PD 16-APR-2002.

XX

PF 13-APR-2000; 2000US-00550374.

XX

PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713393.

PR 06-MAR-1998; 98US-00036579.

XX

PA (REGC) UNIV CALIFORNIA.

PA (SCRI) SCRIPPS RES INST.

XX

PI Prusiner SB, Williamson RA, Burton DR;

XX

DR WPI; 2002-433675/46.

XX

PT Immunoassays for detecting scrapie isoforms of prion protein (PrPSc) and

PT for purifying PrPSc from samples, useful e.g. in diagnosing PrPSc disease

PT and testing pharmaceuticals for contamination.

XX

PS Disclosure; Fig 3; 58pp; English.

XX

CC The present invention describes methods for detecting scrapie isoforms of

CC prion protein (PrPSc) infection in dead animals, purifying materials

CC suspected of containing PrPSc proteins and treating materials, using

CC antibodies specific for PrPSc. Also described: (1) method of determining

CC PrPSc infection in a dead animal, comprising: (a) extracting tissue from

CC an animal that has died; (b) contacting the tissue with an antibody

CC characterized by its ability to bind to native PrPSc in situ (the

CC antibody binds to a form of PrPSc specific to the animal that has died);

CC and (c) determining if the antibody has bound to PrPSc (the presence of

CC PrPSc in the tissue is indicative of PrPSc infection); (2) a method of

CC purifying a material suspected of containing a PrPSc protein, comprising:

CC (a) contacting the material with an antibody (characterized by its

CC ability to bind native PrPSc in situ) which is bound to a support surface

CC ; and (b) removing material not bound to the antibody; (3) a method of

CC treating a material, comprising applying (to the material) an antibody

CC that binds native PrPSc in situ. The methods are used for diagnosing and

CC detecting prion disease (scrapie) in dead animal tissue (i.e. scrapie

CC immunosays), for separating PrPSc proteins from biological samples

CC (i.e. immunoprecipitation) and for treating materials. The present

CC sequence represents the bovine prion protein (PrP) which is given in the

CC exemplification of the present invention

XX

SO Sequence 263 AA;

Query Match 100.0%; Score 217; DB 5; Length 263;

Best Local Similarity 100.0%; Pred. No. 1.9e-20;

Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 174 RPVDQYSONNPFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 14

ABUS8869

XX ABUS8869 standard; protein; 263 AA.

XX

AC ABUS8869;

XX

DT 15-APR-2003 (first entry)

XX

DE Bovine prion protein (PrP).

XX

KW Prion protein; native prion protein; PrPSc; phage display library;

KM pharmaceutical; food; cosmetic; prion neutralisation; anti-PrP-antibody;

KW scrapie; bovine spongiform encephalopathy; BSE; mad cow disease;

KM feline spongiform encephalopathy.

XX

OS Bos sp.

XX

PN US2002150571-A1.

XX

PD 17-OCT-2002.

XX

PF 30-AUG-2001; 2001US-00943906.

XX

PR 14-SEP-1995; 95US-00528104.

PR 13-SEP-1996; 96US-00713393.

PR 06-MAR-1998; 98US-00036579.

PR 13-APR-2000; 2000US-00550374.

XX

PA (PRUS) PRUSINER S B.

PA (WILL) WILLIAMSON R A.

PA (BURT) BURTON D R.

XX

PI Prusiner SB, Williamson RA, Burton DR;

XX

DR WPI; 2003-198264/19.

XX

PT Novel antibody that has the ability to specifically bind to native prion

PT protein PrPSc in situ, useful for detecting human PrPSc in a source, for

PT determining the cause of death of an animal, or in therapy.

XX

PS Disclosure; Fig 3; 36pp; English.

XX

CC The invention describes an antibody (I) that has the ability to

CC specifically bind to native prion protein PrPSc in situ, where (I) is

CC produced by synthesizing a library of antibodies on phage, panning the

CC library against a sample by bringing the phage into contact with a

CC composition comprising PrP proteins, and isolating phage which bind PrPSc

CC protein. (I) is useful for: detecting human PrPSc in a source; for

CC determining the cause of death of an animal (e.g. scrapie, bovine

CC spongiform encephalopathy (BSE) or mad cow disease and feline spongiform

CC encephalopathy); for purifying a material suspected of containing PrPSc

CC protein, by contacting the material with a sufficient amount of (I) which

CC is bound to a support surface and removing material not bound to (I); for

treating a material by adding to the material a sufficient amount of (1) to neutralise PrP^{Sc} protein infectivity; in an assay to screen for the presence of prions (1.e. PrP^{Sc}) in products such as pharmaceuticals, food or cosmetics, in prion neutralisation to purify a product, in extraction of prion proteins, and in therapy. (1) provides a fast, efficient and cost effective assay for detecting the presence of PrP^{Sc} in a sample, and binds to a relatively high percentage of the infectious form of PrP^{Sc}. This is the amino acid sequence of a prion protein used in the creation of an anti-prion protein-antibody

CC
XX
SQ Sequence 263 AA;

Query Match 100.0%; Score 217; DB 6; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDI 213

RESULT 15

AAE33228 ID AAE33228 standard; protein; 263 AA.

XX AC AAE33228;

XX DT 02-MAY-2003 (first entry)

XX DE Bovine PrP protein.

XX KM Bovine; pathogenic; prion protein; PrP^{Sc}; Creutzfeldt-Jakob disease;

XX KM Kuru; vaccine; neuroprotective; immunostimulant.

XX OS Bos sp.

XX PN WO200287502-A2.

XX PD 07-NOV-2002.

XX PF 25-APR-2002; 2002MO-US013346.

XX PR 01-MAY-2001; 2001US-0287971P.

XX PA (REGC) UNIV CALIFORNIA.

XX PI Prusiner SB, Peretz D, Williamson RA, Burton DR;

XX DR WPI; 2003-140150/13.

XX PT Composition for clearing a disease conformation of a protein, especially PrP^{Sc} protein, and treating, e.g., Creutzfeldt-Jakob disease comprises PT molecules, e.g., antibodies which bind and prevent conversion to disease conformation.

XX PS Disclosure; Page 37-38; 38pp; English.

XX The invention relates to composition for clearing a disease conformation of a protein, especially pathogenic prion protein (PrP^{Sc}) from a cell. CC The composition comprises molecules which bind a number of epitopes on a CC first conformation of a protein, where the conversion to a second CC conformation is prevented to allow a cell to clear protein in the second CC conformation. The composition is useful for preventing or treating, e.g., CC kuru or Creutzfeldt-Jakob disease. It is also used as a vaccine. The CC present sequence is bovine PrP protein

XX SQ Sequence 263 AA;

Query Match 100.0%; Score 217; DB 6; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDI 40

DB 174 RPVDQYSNONNFVHDCVNIIVKEHTVTTTGGNFETDI 213

Search completed: December 3, 2004, 00:55:42
Job time : 66.2295 secs

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OM protein - protein search, using SW model

Run on: December 3, 2004, 00:12:37 ; Search time 12 Seconds
(without alignments)
320.723 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Sequence: 1 RPVDQYSNONNFVHDCVNIIVKHEHTVTTTGGENFTETDI 40

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters: 283416

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	217	100.0	256 2	JU0268 major prion protei
2	217	100.0	264 2	A54330 major prion protei
3	214	98.6	256 2	S37149 prion protein - go
4	214	98.6	256 2	A54281 major prion protei
5	214	98.6	264 2	S37137 prion protein - gr
6	212	97.7	226 2	A53892 prion-related prot
7	212	97.7	239 2	S53633 major prion protei
8	212	97.7	241 2	S71048 major prion protei
9	212	97.7	241 2	S71056 major prion protei
10	212	97.7	245 2	S53627 major prion protei
11	212	97.7	245 2	S71045 major prion protei
12	212	97.7	252 2	S53631 major prion protei
13	212	97.7	253 2	S53624 major prion protei
14	212	97.7	253 2	S53620 major prion protei
15	212	97.7	253 2	S53625 major prion protei
16	212	97.7	253 2	S53623 major prion protei
17	212	97.7	253 2	S53622 major prion protei
18	212	97.7	253 2	S71055 major prion protei
19	212	97.7	253 2	S53616 major prion protei
20	212	97.7	253 2	S53618 major prion protei
21	212	97.7	253 2	S53619 major prion protei
22	212	97.7	254 2	A23544 major prion protei
23	212	97.7	260 2	S53629 major prion protei
24	210	96.8	254 1	UHYH major prion prp-Sc
25	210	96.8	257 2	A23545 major prion prp27-
26	209	96.3	232 2	S71041 major prion protei
27	209	96.3	252 2	S53634 major prion protei
28	209	96.3	252 2	UC6175 prion protein - ra
29	209	96.3	253 2	S53614 major prion protei

30	209	96.3	253 2	I37032 major prion protei
31	209	96.3	254 2	B34759 prion protein - go
32	209	96.3	254 2	A34759 prion protein - Ch
33	208	95.9	252 2	I61848 major prion protei
34	208	95.9	257 2	J01900 major prion protei
35	206	94.9	253 1	UJHU major prion protei
36	204	94.0	253 2	S53617 major prion protei
37	204	94.0	253 2	S53635 prion protein - si
38	204	94.0	253 2	I61847 major prion protei
39	59	27.2	139 2	H90004 hypothetical prote
40	58.5	27.0	267 2	A37372 prion protein homo
41	58	26.7	346 2	B71496 tryptophan-cRNA 11
42	57.5	26.5	267 1	UJCH major prion protei
43	57.5	26.5	273 2	A46280 prion protein - ch
44	57	26.3	423 2	E97165 flagellar hook pro
45	56	25.8	384 2	H89873 hypothetical prote

ALIGNMENTS

RESULT 1
JU0268
major prion protein 2 precursor - bovine
N:Alternate names: prion protein, short variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 31-Mar-1992 #sequence_revision 31-Mar-1992 #text_change 09-Jul-2004
C:Accession: JU0268
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0952
A:Accession: JU0268
A:Molecule type: DNA
A:Residues: 1-256 <YOS>
A:Cross-references: UNIPROT:Q01880
C:Superfamily: major prion protein
C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
F:1-24/Domain: signal sequence #status predicted <SIG>
F:25-256/Product: major prion protein 2 #status predicted <MAT>
F:60-91/Region: 8-residue repeats
F:182-217/Disulfide bonds: #status predicted
F:184/200/Binding site: carboxydrate (Asn) (covalent) #status predicted

Query Match 100.0%; Score 217; DB 2; Length 256;
Best Local Similarity 100.0%; Pred. No. 6.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNONNFVHDCVNIIVKHEHTVTTTGGENFTETDI 40
Db 167 RPVDQYSNONNFVHDCVNIIVKHEHTVTTTGGENFTETDI 206

RESULT 2
A54330
major prion protein 1 precursor - bovine
N:Alternate names: prion protein, long variant; Prp protein
C:Species: Bos primigenius taurus (cattle)
C>Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 09-Jul-2004
C:Accession: A54330; JT0953; A48551; S07347; I46931
R:Goldmann, W.; Hunter, N.; Martin, T.; Dawson, M.; Hope, J.
J. Gen. Virol. 72, 201-204, 1991
A>Title: Different forms of the bovine Prp gene have five or six copies of a short, G-C
A:Reference number: A54330; MUID:91116314; PMID:1671225
A:Accession: A54330
A:Molecule type: DNA
A:Residues: 1-264 <GOL>
A:Cross-references: UNIPROT:P10279; GB:X55882; NID:9683; PIDN:CAA39368.1; PID:9684
R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
submitted to JIPID, November 1991
A:Reference number: JT0952
A:Accession: JT0953
A:Molecule type: DNA
A:Residues: 1-264 <YOS>

A3.Cross-references: GB:DI0613; NID:G217595; PIDN:BAA01468.1; PID:G217596
 A.Accession: J70952
 A.Molecule type: DNA
 A.Residues: 1-217, 'K', 219-264 <Y02>
 R.Yoshihito, U.; Iinuma, T.; Ishiguro, N.; Horiuchi, M.; Imamura, M.; Shinagawa, M.
 Virtus Genes 6, 343-356, 1992
 A.Title: Comparative sequence analysis and expression of bovine PzP gene in mouse L-929
 A.Reference number: A48551; MUID:93118243; PMID:1362024
 A.Accession: A48551
 A.Molecule type: mRNA
 A.Residues: 1-217, 'K', 219-264 <Y03>
 A.Cross-references: GB:AB001468; NID:G1888342; PIDN:BAA19253.1; PID:G1888343
 A.Experimental source: brain
 A.Note: sequence extracted from NCBI backbone (NCBIN:121620, NCBI:121621)
 R.Hope, J.; Reelie, L.J.D.; Hunter, N.; Multahup, G.; Beyreuther, K.; White, H.; Scott, N.
 Nature 336, 390-392, 1988
 A.Title: Fibrils from brains of cows with new cattle disease contain scrapie-associated
 A.Reference number: S07347; MUID:89057122; PMID:2904126
 A.Accession: S07347
 A.Molecule type: protein
 A.Residues: 25-36 <HOP>
 R.Prusiner, S.B.; Fuzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabriel, U.
 Infect. Dis. 167, 602-613, 1993
 A.Title: Immunologic and molecular biology studies of prion proteins in bovine spongiform
 A.Reference number: 146931; MUID:93179783; PMID:8440932
 A.Accession: 146931
 A.Status: preliminary; translated from GB/EMBL/DBJ
 A.Molecule type: mRNA
 A.Residues: 1-264 <PRU>
 A.Cross-references: GB:S55629; NID:G266111; PIDN:AAB25514.1; PID:G266112
 A.Genetic: PrP
 C.Superfamily: major prion protein
 C.Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 E:1-24/Domain: signal sequence #status predicted <Sig>
 E:25-264/Product: major prion protein 1 #status predicted <MAT>
 F:60-99/Region: 8-residue repeats (W-Q-P-H-G-G)
 F:190-225/Disulfide bonds: #status predicted
 F:192-208/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 100.0%; Score 217; DB 2; Length 264;
 Best Local Similarity 100.0%; Pred. No. 6.6e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 40
 DB 175 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 214

RESULT 3
 S37149
 C.Species: Capra aegagrus hircus (domestic goat)
 C.Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C.Accession: S37149
 R.Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A.Reference number: S37137
 A.Accession: S37137
 A.Status: preliminary
 A.Molecule type: DNA
 A.Residues: 1-256 <MAR>
 A.Cross-references: UNIPROT:P52113; EMBL:X74758; NID:G400442; PIDN:CAA52774.1; PID:G4004
 C.Superfamily: major prion protein

Query Match 98.6%; Score 214; DB 2; Length 256;
 Best Local Similarity 97.5%; Pred. No. 1.5e-19;
 Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 40
 DB 167 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 206

RESULT 4
 A54281
 major prion protein - sheep
 C.Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)
 C.Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C.Accession: A54281; A35983
 R.Westaway, D.; Zuliani, V.; Cooper, C.M.; Da Costa, M.; Neuman, S.; Jenny, A.L.; Detwiler
 Genes Dev. 8, 959-969, 1994
 A.Title: Homozygosity for prion protein alleles encoding glutamine-171 renders sheep susc
 A.Reference number: A54281; MUID:95011594; PMID:7926780
 A.Accession: A54281
 A.Molecule type: DNA
 A.Residues: 1-256 <MS>
 A.Cross-references: UNIPROT:O46648; GB:X79912; NID:G510442; PIDN:CAA56283.1; PID:G117158
 R.Goldmann, W.; Hunter, N.; Foster, J.D.; Salbaum, J.M.; Beyreuther, K.; Hope, J.
 Proc. Natl. Acad. Sci. U.S.A. 87, 2476-2480, 1990
 A.Title: Two alleles of a neutral protein gene linked to scrapie in sheep.
 A.Reference number: A35983; MUID:90207218; PMID:1969635
 A.Accession: A35983
 A.Molecule type: DNA
 A.Residues: 1-170, 'R', 172-256 <GOL>
 A.Cross-references: GB:M3133; NID:G166039; PIDN:AAB97765.1; PID:G166040
 C.Superfamily: major prion protein

Query Match 98.6%; Score 214; DB 2; Length 256;
 Best Local Similarity 97.5%; Pred. No. 1.5e-19;
 Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 40
 DB 167 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 206

RESULT 5
 S37137
 prion protein - greater kudu
 C.Species: Tragelaphus streptoceros (greater kudu)
 C.Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
 C.Accession: S37137
 R.Martin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993
 A.Reference number: S37137
 A.Accession: S37137
 A.Status: preliminary
 A.Molecule type: DNA
 A.Residues: 1-264 <MAR>
 A.Cross-references: UNIPROT:P40242; EMBL:X74771; NID:G398937; PIDN:CAA52781.1; PID:G39893
 C.Superfamily: major prion protein

Query Match 98.6%; Score 214; DB 2; Length 264;
 Best Local Similarity 97.5%; Pred. No. 1.6e-19;
 Matches 39; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 40
 DB 175 RPVDQYNNQNFVHDCVNIITVKEHTVTTTGTGENTETDI 214

RESULT 6
 A53892
 prion-related protein - rat (fragment)
 C.Species: Rattus norvegicus (Norway rat)
 C.Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
 C.Accession: A53892
 R.Liao, Y.C.; Tokes, Z.; Lhm, E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
 Lab. Invest. 57, 370-374, 1987
 A.Title: Cloning of rat "prion-related protein" cDNA.
 A.Reference number: A53892; MUID:88037055; PMID:2889848
 A.Accession: A53892
 A.Status: preliminary
 A.Molecule type: mRNA
 A.Residues: 1-226 <LIA>

A:Cross-references: UNIPROT:P13852; GB:M20313; NID:g206391; PIDN:AAA1947.1; PID:g206392
C:Superfamily: major prion protein

Query Match 97.7%; Score 212; DB 2; Length 226;
Best Local Similarity 92.5%; Pred. No. 2.4e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 40
DB 136 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 175

RESULT 7

S53633
Major prion protein - douroucouli (fragment)
C:Species: Actus trivirgatus (douroucouli, night monkey, owl monkey)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53633; S71042
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53633
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-239 <SCH>
A:Cross-references: UNIPROT:P40245; EMBL:U08293
R:Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71042
A:Molecule type: DNA
A:Residues: 1-202, 'E', 204-239 <SCW>
A:Cross-references: EMBL:U08293; NID:g474344; PIDN:AAC50082.1; PID:g474345
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 239;
Best Local Similarity 92.5%; Pred. No. 2.5e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 40
DB 156 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 195

RESULT 8

S71048
Major prion protein - Callicebus moloch (fragment)
C:Species: Callicebus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71048; S53632
R:Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40248; EMBL:U08312; NID:g475585; PIDN:AAC50100.1; PID:g4755
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53632
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 241;
Best Local Similarity 92.5%; Pred. No. 2.6e-19;

Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 40
DB 157 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 196

RESULT 9

S71056
Major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C:Accession: S71056; S53621
R:Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: UNIPROT:P40255; EMBL:U08303; NID:g474364; PIDN:AAC50091.1; PID:g47436
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08303
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 241;
Best Local Similarity 92.5%; Pred. No. 2.6e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 40
DB 157 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 196

RESULT 10

S53627
Major prion protein - green monkey
C:Species: Cercopithecus aethiops (green monkey, grivet)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004
C:Accession: S53627; S71043
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: UNIPROT:P40250; EMBL:U08291
R:Schaezel, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 245;
Best Local Similarity 92.5%; Pred. No. 2.6e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 40
DB 156 RPVDQYSONNPFVHDCVNTITVKHETVTTTGGNFETDI 195

RESULT 11

S71045

major prion protein - Cercopithecus diana

C:Species: Cercopithecus diana

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004

C:Accession: S71045; S53628

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71045

A:Molecule type: DNA

A:Residues: 1-245 <SCH>

A:Cross-references: UNIPROT:P40250; EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g474342

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53628

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-10, 'L', '12-202, 'R', '204-239 <SCW>

A:Cross-references: EMBL:U08292

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 245; Best Local Similarity 92.5%; Pred. No. 2, 7e-19; Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDI 40

DB 156 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDV 195

RESULT 12

S53631

major prion protein - brown capuchin

C:Species: Cebus apella (brown capuchin, black-capped capuchin)

C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 09-Jul-2004

C:Accession: S53631; S71044

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53631

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-252 <SCH>

A:Cross-references: UNIPROT:P40249; EMBL:U08295

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71044

A:Molecule type: DNA

A:Residues: 1-209, 'E', '211-252 <SCW>

A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 252; Best Local Similarity 92.5%; Pred. No. 2, 7e-19; Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDI 40

DB 163 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDV 202

RESULT 13

S53624

major prion protein - stump-tailed macaque

C:Species: Macaca arctoides (stump-tailed macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53624; S71051

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53624

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08311

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71051

A:Molecule type: DNA

A:Residues: 1-210, 'E', '212-253 <SCW>

A:Cross-references: EMBL:U08311; NID:g475583; PIDN:AAC50099.1; PID:g475584

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 253; Best Local Similarity 92.5%; Pred. No. 2, 7e-19; Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDI 40

DB 164 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDV 203

RESULT 14

S53623

major prion protein - crab-eating macaque

C:Species: Macaca fascicularis (crab-eating macaque)

C:Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53623; S71052

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53623

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08298

R:Schaezel, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71052

A:Molecule type: DNA

A:Residues: 1-210, 'E', '212-253 <SCW>

A:Cross-references: EMBL:U08298; NID:g474354; PIDN:AAC50087.1; PID:g474355

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 253; Best Local Similarity 92.5%; Pred. No. 2, 7e-19; Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDI 40

DB 164 RPVDQYSONNPFVHDCVNTITVKEHTVTTTGGNFETDV 203

RESULT 15

S53620

major prion protein - hamadryas baboon

C:Species: Papio hamadryas (hamadryas baboon)

C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 11-Aug-2003

C:Accession: S53620; S71058

R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53620
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08294
R:Schatz1, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71058
A:Molecule type: DNA
A:Residues: 1-210,'E',212-253 <SCH>
A:Cross-references: EMBL:U08294; NID:g474346; PIDN:AAC50083.1; PID:g474347
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie

Query Match 97.7%; Score 212; DB 2; Length 253;
Best Local Similarity 92.5%; Pred. No. 2.7e-19;
Matches 37; Conservative 3; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQXNQNNEVHDCNITVKEHTVTTTKGENFTETDI 40
DB 164 RPVDQXNQNNEVHDCNITVKEHTVTTTKGENFTETDV 203

Search completed: December 3, 2004, 00:38:42
Job time : 12 secs

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 Best Local Similarity 100.0%; Pred. No. 1.5e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 32 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETEDI 71

RESULT 3
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 AC 097912; (TREMBlrel. 10, Created)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
 DT Prion protein (Fragment).
 GN Name:PrP;
 OS Bison bonasus (European bison).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bison.
 OC NCBI_TaxID=9902;
 RN [1]
 RP TISSUE=PB;
 RC MEDLINE=9903687; PubMed=10373359;
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.,
 RA "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 RT of flexible regions of the prion protein."
 RT J. Mol. Biol. 289:1163-1178(1999).
 RL -1- SIMILARITY: Belongs to the prion family.
 CC EMBL: AF11328; AAD1999.1; -
 DR GO; GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
 DR GO; GO:0007165; P:signal transduction; IEA.
 DR InterPro: IPR001610; PAC.
 DR InterPro: IPR00817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion_octapep; 6.
 DR SMART: SM00086; PAC; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON TER 1
 FT NON TER 200
 SO SEQUENCE 200 AA; 21674 MW; 1F270CDF4B5E271B CRC64;

Query Match 100.0%; Score 217; DB 2; Length 200;
 Best Local Similarity 100.0%; Pred. No. 3.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 132 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETEDI 171

RESULT 4
 ID 06J6V2 PRELIMINARY; PRT; 211 AA.
 AC 06J6V2; (TREMBlrel. 27, Created)
 DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
 DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
 DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
 DT Prion protein (Fragment).
 GN Name:PrNP;
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_TaxID=9913;

RP [1]
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RA "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
 RT cattle."
 RT Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RA Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 CC -1- SIMILARITY: Belongs to the prion family.
 DR EMBL: AY585239; AAT09128.1; -
 DR InterPro: IPR00817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR Pfam: PF03991; Prion_octapep; 5.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 DR Prion.
 KW NON TER 1
 FT NON TER 1
 FT CHAIN <1>211 PrPc protein.
 FT NON TER 211
 SO SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 3.3e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETEDI 40
 144 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETEDI 183

RESULT 5
 ID AAT09128 PRELIMINARY; PRT; 211 AA.
 AC AAT09128; (TREMBlrel. 27, Created)
 DT 20-MAY-2004 (TREMBlrel. 27, Last sequence update)
 DT 20-MAY-2004 (TREMBlrel. 27, Last sequence update)
 DT 20-MAY-2004 (TREMBlrel. 27, Last annotation update)
 DT Prion protein (Fragment).
 DE Prion.
 GN PrNP;
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovinae; Bos.
 OC NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RA "Cloning and sequencing of PrPc mature protein gene of Chinese yellow
 RT cattle."
 RT Zhongguo Dongwu Jiaoyi 19:21-22(2002).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Chinese yellow cattle; TISSUE=Blood;
 RA Wang Z., Wang C., Wu X.;
 RA Submitted (MAR-2004) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AY585239; AAT09128.1; -
 DR Prion.
 KW NON TER 1
 FT NON TER 1
 FT CHAIN <1>211 PrPc protein.
 FT NON TER 211
 SO SEQUENCE 211 AA; 22990 MW; 41F5D7CA624B4779 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 211;
 Best Local Similarity 100.0%; Pred. No. 3.3e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETEDI 40

Db 144 RPVDQYNSNONNFVHDCVNITVKEHTVTTTGGNFETDI 183

RESULT 6
ID 09TV00 PRELIMINARY; PRT; 216 AA.

AC 09TV00; 01-MAY-2000 (TREMBLER). 13, Created)
DT 01-MAY-2000 (TREMBLER). 13, Last sequence update)
DE 01-JUN-2003 (TREMBLER). 24, Last annotation update)
DE Prion protein (Fragment).

GN Name=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RA MEDLINE=990303687; PubMed=10733359;
RX Wopfner F., Weidenhofer G., Schneider R., von Bruun A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
CC -1- SIMILARITY: Belongs to the prion family.
EMBL: AF117327; A01998.1; -
DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO: GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KM Prion.
FT NON_TER 1 1
FT NON_TER 216 216
SQ SEQUENCE 216 AA; 23425 MW; BEBECF479966730 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 216;
Best Local Similarity 100.0%; Pred. No. 3.4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNSNONNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 135 RPVDQYNSNONNFVHDCVNITVKEHTVTTTGGNFETDI 174

RESULT 7
PRP2_BOVIN STANDARD; PRT; 256 AA.
AC 001880;
DT 01-JUN-1994 (Rel. 29, Created)
DT 01-JUN-1994 (Rel. 29, Last sequence update)
DT 29-MAR-2004 (Rel. 43, Last annotation update)
DE Major prion protein 2 precursor (PrP) (Major scrapie-associated fibril
protein 2).
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Brain;
RX MEDLINE=91116243; PubMed=1362024;
Yoshimoto J., Iinuma T., Ishiguro N., Horiuchi M., Imamura M.,

RA Shinagawa M.;
RT "Comparative sequence analysis and expression of bovine PrP gene in
RT mouse L-929 cells.";
RL Virus Genes 6:343-356(1992).
CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
CC host genome and is expressed both in normal and infected cells.
CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
CC "rods".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: Found in high quantity in the brain of humans and animals
CC infected with degenerative neurological diseases such as kuru,
CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome
CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
CC transmissible mink encephalopathy (TME), etc.
CC -1- SIMILARITY: Belongs to the prion family.
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CC or send an email to license@isb-sib.ch).
EMBL: D10614; BAA01469.1; -
DR PIR: J0268; J0268.
DR HSP: P10279; IDW8.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion octapep; 5.
DR PRINTS: PR00341; PRION.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Glycoprotein; GPI-anchor; Lipoprotein; Membrane; Prion; Repeat;
KW Signal.
FT SIGNAL 1 24
FT CHAIN 25 233
FT PROPEP 234 256
FT LIPID 233 233
FT CARBOHYD 184 184
FT CARBOHYD 200 200
FT DISULFID 182 217
FT DOMAIN 54 95
FT REPEAT 54 62
FT REPEAT 63 70
FT REPEAT 71 78
FT REPEAT 79 86
FT REPEAT 87 95
SQ SEQUENCE 256 AA; 27880 MW; 0D969FP2D9033B30 CRC64;

Query Match 100.0%; Score 217; DB 1; Length 256;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNSNONNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 167 RPVDQYNSNONNFVHDCVNITVKEHTVTTTGGNFETDI 206

RESULT 8
PRIO_BOVIN STANDARD; PRT; 264 AA.
AC P10279;
DT 01-MAR-1989 (Rel. 10, Created)
DT 01-NOV-1991 (Rel. 20, Last sequence update)
DT 01-OCT-2004 (Rel. 45, Last annotation update)
DE Major prion protein 1 precursor (PrP) (Major scrapie-associated fibril
protein 1).
GN Name=PRNP; Synonyms=PrP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;

CC Bovinae; Bos.
 CC NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian;
 RA MEDLINE=91116314; PubMed=1671225;
 RX Goldmann W., Hunter N., Martin T.,
 RT "Differential forms of the bovine PrP gene have five or six copies of a
 RT short, G-C-rich element within the protein-coding exon."
 RL J. Gen. Virol. 72:201-204 (1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA MEDLINE=93118243; PubMed=1362024;
 RX Yoshimoto J., Iinuma T., Ishiguro N., Horiuchi M., Imamura M.,
 RT Shingawa M.,
 RT "Comparative sequence analysis and expression of bovine PrP gene in
 RT mouse L-929 cells."
 RL Virus Genes 6:343-356 (1992).
 RN [3]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=93179783; PubMed=8440932;
 RX Prusiner S.B., Fuzi M., Scott M., Serban D., Serban H., Taraboulos A.,
 RA Gabriel J.M., Wells G.A., Wilesmith J.W., Bradley R.,
 RT "Immunologic and molecular biologic studies of prion proteins in
 RT bovine spongiform encephalopathy."
 RL J. Infect. Dis. 167:602-613 (1993).
 RN [4]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Holstein-Friesian; TISSUE=Brain;
 RA Horiuchi M.,
 RT Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Jersey;
 RA MEDLINE=94422903; PubMed=11531705;
 RX Hillis D., Comincini S., Schlaepfer J., Dolf G., Ferretti L.,
 RA Williams J.L.,
 RT "Complete genomic sequence of the bovine prion gene (PRNP) and
 RT polymorphism in its promoter region."
 RL Anim. Genet. 32:231-232 (2001).
 RN [6]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Korean;
 RA Yoo H.S., Kang S.G., Choi I.S., Kang S.K., Hwang W.S.,
 RT "Nucleotide sequence of PrP cDNA in Korean cattle."
 RL Submitted (JUN-2002) to the EMBL/GenBank/DBJ databases.
 RN [7]
 RP SEQUENCE OF 1-15 FROM N.A.
 RA Tanaka M., Inoue S., Ikeda T., Horiuchi M., Ishiguro N., Shingawa M.,
 RT Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
 RN [8]
 RP SEQUENCE OF 25-36.
 RA MEDLINE=89057122; PubMed=2904126;
 RX Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.,
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-
 RT associated protein."
 RL Nature 336:390-392 (1988).
 RN [9]
 RP STRUCTURE BY NMR OF 132-241.
 RA MEDLINE=20359707; PubMed=10899999;
 RX Lopez Garcia F., Zahn R., Riek R., Wuthrich K.,
 RT "NMR structure of the bovine prion protein."
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339 (2000).
 CC -1- FUNCTION: The function of PrP is not known. PrP is encoded in the
 CC host genome and is expressed both in normal and infected cells.
 CC -1- SUBUNIT: PrP has a tendency to aggregate yielding polymers called
 CC "rod".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: Found in high quantity in the brain of humans and animals
 CC infected with degenerative neurological diseases such as kuru,
 CC Creutzfeldt-Jakob disease (CJD), Gerstmann-Strausler syndrome

CC (GSS), scrapie, bovine spongiform encephalopathy (BSE),
 CC transmissible mink encephalopathy (TME), etc.
 CC -1- SIMILARITY: Belongs to the prion family.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
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 CC -----
 CC EMBL; X55882; CAJ39368.1; -
 CC EMBL; D10612; BAA01467.1; -
 CC EMBL; D10613; BAA01468.1; -
 CC EMBL; S55829; AAB25514.1; -
 CC EMBL; AB001468; BAA19253.1; -
 CC EMBL; AJ298878; CAC37367.1; -
 CC EMBL; AF517842; AAM66709.1; -
 CC EMBL; D26151; BAA05138.1; -
 CC PIR; A54330; A54330.
 CC PDB; 1DWZ; NMR; A=130-241.
 CC PDB; 1DWZ; NMR; A=130-241.
 CC PDB; 1DX0; NMR; A=23-241.
 CC PDB; 1DX1; NMR; A=23-241.
 CC InterPro; IPR000817; Prion.
 CC Pfam; PF00377; Prion; 1.
 CC Pfam; PF03991; Prion octapep; 6.
 CC PRINTS; PR00341; PRION.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 CC 3D-structure; Direct protein sequencing; Glycoprotein; GPI-anchor;
 CC Lipoprotein; Membrane; Polymorphism; Prion; Repeat; Signal.
 CC KW SIGNAL 1 24
 CC FT CHAIN 25 241
 CC FT PROPEP 242 264
 CC FT LIPID 241 241
 CC FT CARBOHYD 192 192
 CC FT CARBOHYD 208 208
 CC FT DISULFID 190 225
 CC FT DOMAIN 54 103
 CC FT REPEAT 54 62
 CC FT REPEAT 63 70
 CC FT REPEAT 71 78
 CC FT REPEAT 79 86
 CC FT REPEAT 87 94
 CC FT REPEAT 95 103
 CC FT VARIANT 71 78
 CC FT CONFLICT 218 218
 CC FT HELIX 136 138
 CC FT STRAND 140 141
 CC FT HELIX 155 162
 CC FT TURN 163 164
 CC FT HELIX 165 167
 CC FT STRAND 173 174
 CC FT HELIX 184 203
 CC FT TURN 204 206
 CC FT HELIX 211 237
 CC SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
 CC Query Match 100.0%; Score 217; DB 1; Length 264;
 CC Best Local Similarity 100.0%; Pred. No. 4.2e-20;
 CC Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC
 CC QY 1 RPYDQYNNQNFVHDCVNITVKEHTVTTTKGSENFETDI 40
 CC Db 175 RPYDQYNNQNFVHDCVNITVKEHTVTTTKGSENFETDI 214
 CC
 CC RESULT 9
 CC 06U03 PRELIMINARY; PRT; 264 AA.
 CC ID 06U03

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AC 06UL03:
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxId=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY367643; AA06450.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; D499780FB265FDOE CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 10
Q6UL04 PRELIMINARY; PRT; 264 AA.
ID Q6UL04
AC Q6UL04;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxId=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY367642; AA064649.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28642 MW; F90214038316A101 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
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Db 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 11
Q6UL05 PRELIMINARY; PRT; 264 AA.
ID Q6UL05
AC Q6UL05;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxId=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY367640; AA064647.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
SQ SEQUENCE 264 AA; 28641 MW; 3B64CF6E215F89A0 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 12
Q6UL06 PRELIMINARY; PRT; 264 AA.
ID Q6UL06
AC Q6UL06;
DT 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OX NCBI_TaxId=9913;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (Aug-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY367639; AA064646.1; -.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
KM Prion.
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8Q SEQUENCE 264 AA; 28584 MW; D06747B5374541D0 CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 13

Q6UT07 PRELIMINARY; PRT; 264 AA.

AC Q6UT07; 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 01-OCT-2004 (TREMBlrel. 28, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=30521;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=Blood;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
RA Yang J., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (JUN-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY367637; AAQ64644.1; -
DR EMBL: AY327450; AAQ93321.1; -
DR EMBL: AY367636; AAQ64643.1; -
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion, octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28614 MW; D6D214038316A231 CRC64;
Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 14

Q6UT09 PRELIMINARY; PRT; 264 AA.

AC Q6UT09; 05-JUL-2004 (TREMBlrel. 27, Created)
DT 05-JUL-2004 (TREMBlrel. 27, Last sequence update)
DT 05-JUL-2004 (TREMBlrel. 27, Last annotation update)
DE Prion protein.
GN Name=Prp;
OS Bos mutus grunniens (Yak).
OC Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=30521;
RN [1]
RP SEQUENCE FROM N.A.

RC TISSUE=Blood;
RA Wu R., Xie Q.G., Liu X.T., Chen H.T., Cheng J.;
RL Submitted (AUG-2003) to the EMBL/GenBank/DBJ databases.
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY367635; AAQ64642.1; -
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion, octapep; 6.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion.
SQ SEQUENCE 264 AA; 28642 MW; 1A909F038304293C CRC64;

Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 15

O7YRN3 PRELIMINARY; PRT; 264 AA.

AC O7YRN3; 01-OCT-2003 (TREMBlrel. 25, Created)
DT 01-OCT-2003 (TREMBlrel. 25, Last sequence update)
DT 01-MAR-2004 (TREMBlrel. 26, Last annotation update)
DE Prion protein precursor Prp.
GN Name=PRNP;
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovinae; Bos.
OC NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A.
RX PubMed=14722726;
RA Heaton M.P., Leymaster K.A., Freking B.A., Hawk D.A., Smith T.P.,
RA Keefe J.W., Snelling W.M., Fox J.M., Chitko-Mckown C.G.,
RA Laegreid W.W.;
RL "Prion gene sequence variation within diverse groups of U.S. sheep,
beef cattle, and deer."
RT Mamm. Genome 14:765-777(2003).
CC -1- SIMILARITY: Belongs to the prion family.
DR EMBL: AY335912; AAP84097.1; -
DR GO: GO:0006355; P:regulation of transcription, DNA-dependent; IEA.
DR GO: GO:0007165; P:signal transduction; IEA.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR Pfam: PF03991; Prion, octapep; 6.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
KW Prion; Signal.
FT SIGNAL 1 24 Potential.
SQ SEQUENCE 264 AA; 28660 MW; F28D533C47205BF5 CRC64;
Query Match 100.0%; Score 217; DB 2; Length 264;
Best Local Similarity 100.0%; Pred. No. 4.2e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 40
DB 175 RPVDQYSNQNNFVHDCVNITVKEHTVTTTGGNFETDI 214

Search completed: December 3, 2004, 00:35:33
Job time : 65.6557 secs

Fri Dec 3 10:54:04 2004

us-10-031-975-24_copy_179_218.rup

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OM protein - protein search, using sw model

Run on: December 3, 2004, 00:06:16 ; Search time 15.1475 Seconds
(without alignments)
175.125 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Perfect score: 217
Sequence: 1 RPVDYSONNMFVHDCVNTVKEHTVTTTGGNFETDI 40Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 478139 seqs, 66318000 residues

Total number of hits satisfying chosen parameters: 478139

Minimum DB seq length: 0
Maximum DB seq length: 2000000000Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summariesDatabase : Issued Patents AA: *
1: /cgn2_6/prodata/1/iaa/5A_COMB.pep: *
2: /cgn2_6/prodata/1/iaa/5B_COMB.pep: *
3: /cgn2_6/prodata/1/iaa/6A_COMB.pep: *
4: /cgn2_6/prodata/1/iaa/6B_COMB.pep: *
5: /cgn2_6/prodata/1/iaa/PCUTUS_COMB.pep: *
6: /cgn2_6/prodata/1/iaa/bcckfile1.pep: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	217	100.0	219	4	US-09-380-015B-2
2	217	100.0	263	1	US-08-242-188-3
3	217	100.0	263	1	US-08-509-261A-3
4	217	100.0	263	1	US-08-660-626-9
5	217	100.0	263	1	US-08-692-892-3
6	217	100.0	263	2	US-08-713-939A-3
7	217	100.0	263	2	US-08-868-162A-23
8	217	100.0	263	3	US-09-031-168-9
9	217	100.0	263	3	US-09-036-579-3
10	217	100.0	263	3	US-09-550-374-3
11	217	100.0	263	4	US-09-943-906-3
12	217	100.0	263	4	US-09-669-516C-9
13	217	100.0	264	3	US-09-128-450-21
14	217	100.0	264	3	US-09-823-494-21
15	217	100.0	264	4	US-09-431-887-24
16	217	100.0	264	4	US-09-627-218B-11
17	214	98.6	255	1	US-08-242-188-4
18	214	98.6	255	1	US-08-509-261A-4
19	214	98.6	255	1	US-08-660-626-10
20	214	98.6	255	1	US-08-692-892-4
21	214	98.6	255	2	US-08-713-939A-4
22	214	98.6	255	2	US-08-868-162A-24
23	214	98.6	255	2	US-09-031-168-10
24	214	98.6	255	3	US-09-036-579-4
25	214	98.6	255	3	US-09-550-374-4
26	214	98.6	255	4	US-09-943-906-4
27	214	98.6	255	4	US-09-669-516C-10

28	214	98.6	256	4	US-09-431-887-25	Sequence 25, Appl
29	214	98.6	256	4	US-09-431-887-28	Sequence 28, Appl
30	214	98.6	264	4	US-09-431-887-27	Sequence 27, Appl
31	212	97.7	245	4	US-09-431-887-5	Sequence 5, Appl
32	212	97.7	245	4	US-09-431-887-15	Sequence 15, Appl
33	212	97.7	252	4	US-09-431-887-17	Sequence 17, Appl
34	212	97.7	253	4	US-09-431-887-3	Sequence 3, Appl
35	212	97.7	253	4	US-09-431-887-7	Sequence 7, Appl
36	212	97.7	253	4	US-09-431-887-9	Sequence 9, Appl
37	212	97.7	253	4	US-09-431-887-10	Sequence 10, Appl
38	212	97.7	253	4	US-09-431-887-11	Sequence 11, Appl
39	212	97.7	253	4	US-09-431-887-12	Sequence 12, Appl
40	212	97.7	253	4	US-09-431-887-14	Sequence 14, Appl
41	212	97.7	253	4	US-09-431-887-16	Sequence 16, Appl
42	212	97.7	253	4	US-09-431-887-18	Sequence 18, Appl
43	212	97.7	254	1	US-08-242-188-1	Sequence 1, Appl
44	212	97.7	254	1	US-08-509-261A-1	Sequence 1, Appl
45	212	97.7	254	1	US-08-660-626-7	Sequence 7, Appl

ALIGNMENTS

RESULT 1
US-09-380-015B-2
Sequence 2, Application US/09380015B
Patent No. 6765088
GENERAL INFORMATION:
APPLICANT: Carsten Korth
TITLE OF INVENTION: Immunological Detection of Prions
NUMBER OF SEQUENCES: 9
CORRESPONDENCE ADDRESS:
ADDRESSEE: Kanton Zuerich vertreten durch die Erziehungsdirektion
STREET: Walchetur
CITY: Zuerich
STATE: Zuerich
COUNTRY: Switzerland
ZIP: CH-8090
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA: US/09/380, 015B
APPLICATION NUMBER: US/09/380, 015B
FILING DATE: 23-Aug-1999
PRIOR APPLICATION DATA:
APPLICATION NUMBER: EP 97102837.8
FILING DATE: 21-FEB-1997
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 219 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULAR TYPE: protein
HYPOTHETICAL: YES
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Bos taurus
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-380-015B-2
Query Match 100.0%; Score 217; DB 4; Length 219;
Best Local Similarity 100.0%; Pred. No. 1.5e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 RPVDYSONNMFVHDCVNTVKEHTVTTTGGNFETDI 40
DB 152 RPVDYSONNMFVHDCVNTVKEHTVTTTGGNFETDI 191
RESULT 2

US-08-242-188-3
Sequence 3, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bosicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242,188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Bosicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BOPRP
US-08-242-188-3

Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYGNQNNFVHDCVNTVTKHTVTTTNGENFTETDI 40
DB 174 RPVDYGNQNNFVHDCVNTVTKHTVTTTNGENFTETDI 213

RESULT 3
US-08-509-261A-3
Sequence 3, Application US/08509261A
Patent No. 5763244
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: Method of Detecting Prions
TITLE OF INVENTION: In a Sample and Transgenic Animal Used fore
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION NUMBER:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-3

Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDYGNQNNFVHDCVNTVTKHTVTTTNGENFTETDI 40
DB 174 RPVDYGNQNNFVHDCVNTVTKHTVTTTNGENFTETDI 213

RESULT 4
US-08-660-626-9
Sequence 9, Application US/08660626
Patent No. 5789655
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPIPTOSE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Acciii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/660,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-660-626-9

Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETDI 213

RESULT 5
US-08-692-892-3
Sequence 3, Application US/08692892
Patent No. 5792901
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: DETECTING PRIONS IN A SAMPLE AND
TITLE OF INVENTION: PRION PREPARATION AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Bozicevic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent In Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/692,892
FILING DATE: 30-JULY-1996
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/056001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-692-892-3
Query Match 100.0%; Score 217; DB 1; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETDI 213

RESULT 6
US-08-713-939A-3

Sequence 3, Application US/08713939A
Patent No. 5846533
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Fast-Seq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/713,939A
FILING DATE: 13-SEP-1996
CLASSIFICATION: 436
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-713-939A-3
Query Match 100.0%; Score 217; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETDI 40
DB 174 RPVDQYSNQNNFVHDCVNTVKEHTVTTTGGNFETDI 213

RESULT 7
US-08-868-162A-23
Sequence 23, Application US/08868162A
Patent No. 5962669
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley
APPLICANT: Cohen, Fred
APPLICANT: James, Thomas
APPLICANT: Kaneko, Kiyotoshi
TITLE OF INVENTION: Prion Protein Modulator Factor
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/868.162A
FILING DATE: 03-JUN-1997
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-083001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650 327-3231
TELEX:
INFORMATION FOR SEQ ID NO: 23:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-08-868-162A-23

Query Match 100.0%; Score 217; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQSNQNNFVHDCVNIIVKEHTVTTTGGNFETDI 40
DB 174 RPVDQSNQNNFVHDCVNIIVKEHTVTTTGGNFETDI 213

RESULT 8
US-09-031-168-9
Sequence 9, Application US/09031168
Patent No. 6150583
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Glenn C. Telling
APPLICANT: Fred E. Cohen
APPLICANT: Michael R. Scott
TITLE OF INVENTION: TRANSGENIC ANIMALS EXPRESSING
TITLE OF INVENTION: EPITOPE-TAGGED PROTEINS
NUMBER OF SEQUENCES: 13
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asctii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/031.168
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/660,626
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127

REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: BOVINE PRION PROTEIN, BoPrP
US-09-031-168-9

Query Match 100.0%; Score 217; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQSNQNNFVHDCVNIIVKEHTVTTTGGNFETDI 40
DB 174 RPVDQSNQNNFVHDCVNIIVKEHTVTTTGGNFETDI 213

RESULT 9
US-09-036-579-3
Sequence 3, Application US/09036579
Patent No. 6290954
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/036.579
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/713,939
FILING DATE: 13-SEP-1996
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-036-579-3

Query Match 100.0%; Score 217; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNITVKEHTVTTTGGKGFETDI 40
DB 174 RPVDQYSGNNFVHDCVNITVKEHTVTTTGGKGFETDI 213

RESULT 10
US-09-550-374-3
Sequence 3, Application US/09550374
Patent No. 6372214
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williams, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/550,374
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/036,579
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX:
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-550-374-3

Query Match 100.0%; Score 217; DB 3; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNITVKEHTVTTTGGKGFETDI 40
DB 174 RPVDQYSGNNFVHDCVNITVKEHTVTTTGGKGFETDI 213

RESULT 11
US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. 6562341
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Williams, R. Anthony
APPLICANT: Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match 100.0%; Score 217; DB 4; Length 263;
Best Local Similarity 100.0%; Pred. No. 1.9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSGNNFVHDCVNITVKEHTVTTTGGKGFETDI 40
DB 174 RPVDQYSGNNFVHDCVNITVKEHTVTTTGGKGFETDI 213

RESULT 12
US-09-669-516C-9
Sequence 9, Application US/09669516C
Patent No. 6602672
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Cohen, Fred E.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: RECOMBINANT CONSTRUCT ENCODING EPIPTOPE
FILE REFERENCE: UCAL-045CON
CURRENT APPLICATION NUMBER: US/09/669,516C
CURRENT FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: 09/031,168
PRIOR FILING DATE: 1998-02-26
PRIOR APPLICATION NUMBER: 08/660,626
PRIOR FILING DATE: 1996-06-06
PRIOR APPLICATION NUMBER: 08/521,992
PRIOR FILING DATE: 1995-08-31
PRIOR APPLICATION NUMBER: 08/509,261
PRIOR FILING DATE: 1995-07-31
PRIOR APPLICATION NUMBER: 08/242,188
PRIOR FILING DATE: 1994-05-13
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 9
LENGTH: 263
TYPE: PRT

ORGANISM: bovine sp.
US-09-669-516C-9

Query Match 100.0%; Score 217; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 1,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40
174 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 13
US-09-128-450-21
Sequence 21, Application US/09128450

PATENT NO. 6211149
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/128,450
CURRENT FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-128-450-21

Query Match 100.0%; Score 217; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40
175 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 14
US-09-823-494-21
Sequence 21, Application US/09823494

PATENT NO. 6355610
GENERAL INFORMATION:
APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
APPLICANT: Priola, Susette
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494
CURRENT FILING DATE: 2001-03-30
PRIOR APPLICATION NUMBER: 09/128,450
PRIOR FILING DATE: 1998-08-03
NUMBER OF SEQ ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 21
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-823-494-21

Query Match 100.0%; Score 217; DB 3; Length 264;
Best Local Similarity 100.0%; Pred. No. 1,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40

DB 175 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 214

RESULT 15
US-09-431-887-24
Sequence 24, Application US/09411887

PATENT NO. 6534036
GENERAL INFORMATION:
APPLICANT: D-Gen Limited
TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
DIAGNOSIS AND TREATMENT OF PRION DISEASE
FILE REFERENCE: ICOT/P21952
CURRENT APPLICATION NUMBER: US/09/431,887
CURRENT FILING DATE: 1999-11-02
PRIOR APPLICATION NUMBER: GB 9824091.4
PRIOR FILING DATE: 1999-11-04
NUMBER OF SEQ ID NOS: 37
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 24
LENGTH: 264
TYPE: PRT
ORGANISM: Bos taurus
US-09-431-887-24

Query Match 100.0%; Score 217; DB 4; Length 264;
Best Local Similarity 100.0%; Pred. No. 1,9e-21;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 40
175 RPVDQYSONNFVHDCVNITVKEHTVTTTGGNFETDI 214

Search completed: December 3, 2004, 00:18:59
Job time : 15.1475 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 3, 2004, 00:15:22 ; Search time 47.3443 Seconds
(without alignments)
301.302 Million cell updates/sec

Title: US-10-031-975-24_COPY_179_218

Perfect score: 217
Sequence: 1 RPVDQYSNONNFVHDCVNTVKEHYVTYTTKGNETETDI 40

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1582122 seqs, 356523098 residues

Total number of hits satisfying chosen parameters: 1582122

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

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20: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	217	100.0	117	14	US-10-050-902-349
2	217	100.0	117	14	US-10-050-902-349
3	217	100.0	117	14	US-10-050-902-349
4	217	100.0	117	14	US-10-346-190-90
5	217	100.0	161	9	US-09-745-003-9
6	217	100.0	256	13	US-10-109-551-2
7	217	100.0	256	16	US-10-479-218-3
8	217	100.0	263	9	US-09-943-906-3
9	217	100.0	264	14	US-10-435-602-3
10	217	100.0	264	9	US-09-823-494-21
11	217	100.0	264	14	US-10-209-194-2
12	217	100.0	264	14	US-10-355-780-11
13	217	100.0	264	14	US-10-304-630-24
				14	US-10-301-488A-30

14	217	100.0	264	14	US-10-301-488A-33	Sequence 33, Appl
15	217	100.0	264	14	US-10-410-907A-13	Sequence 13, Appl
16	217	100.0	264	14	US-10-346-190-80	Sequence 80, Appl
17	217	100.0	264	14	US-10-417-964A-19	Sequence 19, Appl
18	217	100.0	264	15	US-10-301-448-30	Sequence 30, Appl
19	217	100.0	264	15	US-10-301-448-33	Sequence 33, Appl
20	217	100.0	264	16	US-10-479-218-2	Sequence 2, Appl
21	217	100.0	255	9	US-09-943-906-4	Sequence 4, Appl
22	214	98.6	255	14	US-10-435-602-4	Sequence 4, Appl
23	214	98.6	256	14	US-10-109-551-4	Sequence 25, Appl
24	214	98.6	256	13	US-10-304-630-25	Sequence 28, Appl
25	214	98.6	256	14	US-10-304-630-28	Sequence 12, Appl
26	214	98.6	256	14	US-10-410-907A-12	Sequence 88, Appl
27	214	98.6	256	14	US-10-346-190-81	Sequence 1, Appl
28	214	98.6	256	16	US-10-479-218-1	Sequence 4, Appl
29	214	98.6	256	16	US-10-479-218-1	Sequence 5, Appl
30	214	98.6	256	16	US-10-479-218-4	Sequence 6, Appl
31	214	98.6	256	16	US-10-479-218-5	Sequence 7, Appl
32	214	98.6	256	16	US-10-479-218-6	Sequence 8, Appl
33	214	98.6	256	16	US-10-479-218-7	Sequence 9, Appl
34	214	98.6	256	16	US-10-479-218-8	Sequence 10, Appl
35	214	98.6	256	16	US-10-479-218-9	Sequence 11, Appl
36	214	98.6	256	16	US-10-479-218-10	Sequence 12, Appl
37	214	98.6	256	16	US-10-479-218-11	Sequence 13, Appl
38	214	98.6	256	16	US-10-479-218-12	Sequence 14, Appl
39	214	98.6	256	16	US-10-479-218-13	Sequence 18, Appl
40	214	98.6	256	16	US-10-479-218-14	Sequence 19, Appl
41	214	98.6	256	16	US-10-479-218-18	Sequence 20, Appl
42	214	98.6	256	16	US-10-479-218-19	Sequence 27, Appl
43	214	98.6	256	16	US-10-479-218-20	Sequence 32, Appl
44	214	98.6	264	14	US-10-304-630-27	
45	213	98.2	264	14	US-10-417-964A-32	

ALIGNMENTS

RESULT 1
US-10-050-902-349
Sequence 349, Application US/10050902
Publication No. US20030175290A1
GENERAL INFORMATION:
APPLICANT: Renner, Wolfgang A.
APPLICANT: Bachmann, Martin
APPLICANT: Tissot, Alain
APPLICANT: Mauret, Patrick
APPLICANT: Lechner, Franziska
APPLICANT: Sebbel, Peter
APPLICANT: Plosek, Christine
TITLE OR INVENTION: Molecular Antigen Array
FILE REFERENCE: 1700.019004
CURRENT APPLICATION NUMBER: US/10/050.902
CURRENT FILING DATE: 2002-01-18
PRIOR APPLICATION NUMBER: US 60/262,379
PRIOR FILING DATE: 2001-01-19
PRIOR APPLICATION NUMBER: US 60/288,549
PRIOR FILING DATE: 2001-05-04
PRIOR APPLICATION NUMBER: US 60/326,998
PRIOR FILING DATE: 2001-10-05
PRIOR APPLICATION NUMBER: US 60/331,045
PRIOR FILING DATE: 2001-11-07
NUMBER OF SEQ ID NOS: 350
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 349
LENGTH: 117
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-902-349
Query Match 100.0%; Score 217; DB 14; Length 117;
Best Local Similarity 100.0%; Pred. No. 1.6e-20;

Matches	40;	Conservative	0;	Mismatches	0;	Indels	0;	Gaps	0;
Qy	1	RPVDOYSONNFVHDCVNITVKEHTVTTTGGNFETDI	40						
Db	43	RPVDOYSONNFVHDCVNITVKEHTVTTTGGNFETDI	82						

RESULT 2
US-10-050-898-349
Application US/10050898

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/ Sequence 349, Application
/ Publication No. US2003017571A1
/ GENERAL INFORMATION:
/ APPLICANT: Renner, Wolfgang A.
/ APPLICANT: Bachmann, Martin
/ APPLICANT: Tiesoc, Alain
/ APPLICANT: Maurer, Patrick
/ APPLICANT: Lechner, Franziska
/ APPLICANT: Gebbel, Peter
/ APPLICANT: Ploesek, Christine
/ APPLICANT: Orlmann, Rainer
/ APPLICANT: Luond, Rainer
/ APPLICANT: Staufenbiel, Matthias
/ APPLICANT: Frey, Peter
/ TITLE OF INVENTION: Molecular Antigen Array
/ FILE REFERENCE: 1700.0190005
/ CURRENT APPLICATION NUMBER: US/10/050,898
/ CURRENT FILING DATE: 2002-01-18
/ PRIOR APPLICATION NUMBER: US 60/262,379
/ PRIOR FILING DATE: 2001-01-19
/ PRIOR APPLICATION NUMBER: US 60/288,549
/ PRIOR FILING DATE: 2001-05-04
/ PRIOR APPLICATION NUMBER: US 60/326,998
/ PRIOR FILING DATE: 2001-10-05
/ PRIOR APPLICATION NUMBER: US 60/331,045
/ PRIOR FILING DATE: 2001-11-07
/ NUMBER OF SEQ ID NOS: 350
/ SOFTWARE: PatentIn Ver. 2.1
/ SEQ ID NO 349
/ LENGTH: 117
/ TYPE: PRT
/ ORGANISM: Artificial sequence
/ FEATURE:
/ OTHER INFORMATION: Modified bovine prion protein fragment
US-10-050-898-349

Query Match      100.0%;   Score 217;   DB 14;   Length 117;
Beet Local Similarity 100.0%;   Pred. No. 1,6e-20;
Matches 40; Conservative 0; Indels 0; Gaps 0

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Oy      1 REPVOYSNONNFVHDCVNTTVEHVTITTTKGFNETDI 40
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Db

RESULT 3
US-10-346-190-90
; Sequence 90, Application US/10346190
; Publication No. US20030219459A1
; GENERAL INFORMATION:
; APPLICANT: Bachmann, Martin
; APPLICANT: Maurer, Patrick
; APPLICANT: Pelliccioli, Erica
; APPLICANT: Renner, Wolfgang A.
; TITLE OF INVENTION: Pion Protein Carrier-Conjugates
; FILE REFERENCE: 1700.0299003
; CURRENT APPLICATION NUMBER: US/10/346,190
; CURRENT FILING DATE: 2003-01-17
; PRIOR APPLICATION NUMBER: 60/396,550
; PRIOR FILING DATE: 2002-07-18
; PRIOR APPLICATION NUMBER: 60/393,725
; PRIOR FILING DATE: 2002-07-08
; PRIOR APPLICATION NUMBER: 60/389,898
; PRIOR FILING DATE: 2002-06-20
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? PRIOR APPLICATION NUMBER: PCT/IB02/00166
? PRIOR FILING DATE: 2002-01-21
? PRIOR APPLICATION NUMBER: 10/050,902
? PRIOR FILING DATE: 2002-01-18
? NUMBER OF SEQ ID NOS: 164
? SOFTWARE: PatentIn version 3.1
? SEQ ID NO 90
? LENGTH: 117
? TYPE: PRT
? ORGANISM: Artificial Sequence
? FEATURE:
? OTHER INFORMATION: Modified Bovine Prion Protein Fragment
US-10-346-190-90
      100.0%;   Score 217;   DB 14;   Length 117;
Query Match          Pred. No. 1.6e-20;
Basic Local Similarity 100.0%;
Matches    40; Conservative 0; Mismatches 0; Gaps 0;

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US-10-346-190-90

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RESULT 4
TIC 00-74E-003-9

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US-09-745-003
/ Sequence 9, Application US/09745003
/ Patent No. US20020042122A1
/ GENERAL INFORMATION:
/ APPLICANT: Bazan, Fernando J
/ TITLE OF INVENTION: Human Proteins; Related Reagents
/ FILE REFERENCE: Prp2
/ CURRENT APPLICATION NUMBER: US/09/745.003
/ CURRENT FILING DATE: 2000-12-20
/ NUMBER OF SEQ ID NOS: 13
/ SOFTWARE: Patentin Ver. 2.0
/ SEQ ID NO 9
/ LENGTH: 161
/ TYPE: PRT
/ ORGANISM: bovine
US-09-745-003-9

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Best Local S:

[illegible]

RESULT 5

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US-10-109-551-2
/ Sequence 2, Application US/10109551
/ Publication No. US20020194635A1
/ GENERAL INFORMATION:
/ APPLICANT: DUNNE, PATRICK W.
/ APPLICANT: PIEPRAHITA, JORGE
/ TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
/ TITLE OF INVENTION: SPONGIFORM ENCEPHALOPATHIES
/ FILE REFERENCE: TANK:207US
/ CURRENT APPLICATION NUMBER: US/10/109,551
/ CURRENT FILING DATE: 2002-03-28
/ PRIOR APPLICATION NUMBER: 60/280,549
/ PRIOR FILING DATE: 2001-03-30
/ NUMBER OF SEQ ID NOS: 10
/ SOFTWARE: Patencin Ver. 2.1
/ SEQ ID NO 2
/ LENGTH: 256
/ TYPE: PRT
/ ORGANISM: Bos taurus
US-10-109-551-2

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Query Match	Score	DB	Length
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Best Local Similarity 100.0%; Pred. No. 4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 167 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 206

RESULT 6

US-10-479-218-3
; Sequence 3, Application US/10479218
; Publication No. US20040171082A1

GENERAL INFORMATION:

APPLICANT: The Secretary of State for Environment, Food & Rural Affairs (DEFRA)
APPLICANT: Jeffrey, Martin
TITLE OF INVENTION: Diagnostic method
FILE REFERENCE: CG/P/135/MOD
CURRENT APPLICATION NUMBER: US/10/479,218
CURRENT FILING DATE: 2003-12-01
PRIOR APPLICATION NUMBER: GB 0113156.4
PRIOR FILING DATE: 2001-05-31
NUMBER OF SEQ ID NOS: 20
SOFTWARE: Patent version 3.1
SEQ ID NO 3
LENGTH: 256
TYPE: PRT
ORGANISM: Ovis aries
US-10-479-218-3

Query Match 100.0%; Score 217; DB 16; Length 256;
Best Local Similarity 100.0%; Pred. No. 4e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 167 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 206

RESULT 7

US-09-943-906-3
; Sequence 3, Application US/09943906
; Patent No. US20020150571A1

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 3:

SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match 100.0%; Score 217; DB 9; Length 263;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 174 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 8

US-10-435-602-3
; Sequence 3, Application US/10435602
; Publication No. US20030228303A1

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
APPLICANT: Williamson, R. Anthony
TITLE OF INVENTION: Antibodies Specific for Native PrPsc
FILE REFERENCE: UCAL059CON3
CURRENT APPLICATION NUMBER: US/10/435,602
CURRENT FILING DATE: 2003-05-09
PRIOR APPLICATION NUMBER: 09/943,906
PRIOR FILING DATE: 2001-08-30
PRIOR APPLICATION NUMBER: 09/550,374
PRIOR FILING DATE: 2000-04-13
PRIOR APPLICATION NUMBER: 09/036,579
PRIOR FILING DATE: 1998-03-06
PRIOR APPLICATION NUMBER: 08/713,939
PRIOR FILING DATE: 1996-09-13
PRIOR APPLICATION NUMBER: 08/528,104
PRIOR FILING DATE: 1995-09-14
NUMBER OF SEQ ID NOS: 86
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 3
LENGTH: 263
TYPE: PRT
ORGANISM: bovine
US-10-435-602-3

Query Match 100.0%; Score 217; DB 14; Length 263;
Best Local Similarity 100.0%; Pred. No. 4.1e-20;
Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 40
Db 174 RPVDQYNNNNFVHDCVNITVKEHTVTTTGGNFETDI 213

RESULT 9

US-09-823-494-21
; Sequence 21, Application US/09823494
; Publication No. US20010041790A1

GENERAL INFORMATION:

APPLICANT: Chesebro, Bruce W
APPLICANT: Caughey, Byron W
APPLICANT: Chabry, Joelle
TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
FILE REFERENCE: 50121
CURRENT APPLICATION NUMBER: US/09/823,494

CURRENT FILING DATE: 2001-03-30
 PRIOR APPLICATION NUMBER: 09/128,450
 PRIOR FILING DATE: 1998-08-03
 NUMBER OF SEQ ID NOS: 29
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 21
 LENGTH: 264
 TYPE: PRT
 ORGANISM: Bos taurus
 US-09-823-494-21

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
 175 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 214

RESULT 10
 US-10-209-194-2
 Sequence 2, Application US/10209194
 Publication No. US20030051264A1
 GENERAL INFORMATION:
 APPLICANT: LILJEDAHN, MONIKA
 APPLICANT: ASPLAND, SIMON ERIC
 TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED
 TITLE OF INVENTION: SUSCEPTIBILITY TO MAD COW DISEASE
 FILE REFERENCE: BIOBANK.007A
 CURRENT APPLICATION NUMBER: US/10/209,194
 CURRENT FILING DATE: 2002-07-29
 PRIOR APPLICATION NUMBER: 60/309,222
 PRIOR FILING DATE: 2001-07-31
 PRIOR APPLICATION NUMBER: 60/367,091
 PRIOR FILING DATE: 2002-03-21
 NUMBER OF SEQ ID NOS: 15
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 2
 LENGTH: 264
 TYPE: PRT
 ORGANISM: Bos taurus
 US-10-209-194-2

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
 175 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 214

RESULT 11
 US-10-355-780-11
 Sequence 11, Application US/10355780
 Publication No. US20030143224A1
 GENERAL INFORMATION:
 APPLICANT: Prusiner, Stanley
 APPLICANT: Safar, Jiri
 APPLICANT: Williams, Anthony
 APPLICANT: Burton, Dennis
 TITLE OF INVENTION: Antibodies Specific for Ungulate Prp
 FILE REFERENCE: UCAL-194
 CURRENT APPLICATION NUMBER: US/10/355,780
 CURRENT FILING DATE: 2003-01-30
 PRIOR APPLICATION NUMBER: US/09/627,218
 PRIOR FILING DATE: 2000-07-27
 NUMBER OF SEQ ID NOS: 11
 SOFTWARE: FastSeq for Windows Version 4.0
 SEQ ID NO 11
 LENGTH: 264
 TYPE: PRT

ORGANISM: Bos taurus
 US-10-355-780-11

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
 174 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 213

RESULT 12
 US-10-304-630-24
 Sequence 24, Application US/10304630
 Publication No. US20030161836A1
 GENERAL INFORMATION:
 APPLICANT: D-Gen Limited
 TITLE OF INVENTION: BIOLOGICAL MATERIALS AND METHODS USEFUL IN THE
 TITLE OF INVENTION: DIAGNOSIS AND TREATMENT OF PRION DISEASE
 FILE REFERENCE: ICOT/P21952
 CURRENT APPLICATION NUMBER: US/10/304,630
 CURRENT FILING DATE: 2002-11-26
 PRIOR APPLICATION NUMBER: US/09/431,887
 PRIOR FILING DATE: 1999-11-02
 PRIOR APPLICATION NUMBER: GB 9824091.4
 PRIOR FILING DATE: 1999-11-04
 NUMBER OF SEQ ID NOS: 37
 SOFTWARE: Patent Ver. 2.0
 SEQ ID NO 24
 LENGTH: 264
 TYPE: PRT
 ORGANISM: Bos taurus
 US-10-304-630-24

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 40
 175 RPVDQYNNNNFVHDCVNIIVKHEHTVTTTGGNFETDI 214

RESULT 13
 US-10-301-488A-30
 Sequence 30, Application US/10301488A
 Publication No. US20030166558A1
 GENERAL INFORMATION:
 APPLICANT: FRANGIONE, Blas
 APPLICANT: WISNIEWSKI, Thomas
 APPLICANT: SIGURDSSON, Einar
 TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 TITLE OF INVENTION: PEPTIDIC HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
 TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 TITLE OF INVENTION: IMMUNE RESPONSE THERETO
 FILE REFERENCE: 5986/1K34US1
 CURRENT APPLICATION NUMBER: US/10/301,488A
 CURRENT FILING DATE: 2002-11-21
 PRIOR APPLICATION NUMBER: US 60/331,801
 PRIOR FILING DATE: 2001-11-21
 NUMBER OF SEQ ID NOS: 55
 SOFTWARE: Patent Ver. 3.1
 SEQ ID NO 30
 LENGTH: 264
 TYPE: PRT
 ORGANISM: Cow
 US-10-301-488A-30

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4.1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNTVTKGHTVTTTGGNFTEIDI 40
 DB 175 RPVDQYSONNFVHDCVNTVTKGHTVTTTGGNFTEIDI 214

RESULT 14

US-10-301-488A-33
 ; Sequence 33, Application US/10301488A
 ; Publication No. US2003016558A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FRANGIONE, Blas
 ; APPLICANT: WISNIEWSKI, Thomas
 ; APPLICANT: SIGURDSSON, Einar
 ; TITLE OF INVENTION: SYNTHETIC IMMUNOGENIC BUT NON-DEPOSIT-FORMING POLYPEPTIDES AND
 ; TITLE OF INVENTION: PEPTIDES HOMOLOGOUS TO AMYLOID BETA, PRION PROTEIN, AMYLIN,
 ; TITLE OF INVENTION: ALPHA-SYNUCLEIN, OR POLYGLUTAMINE REPEATS FOR INDUCTION OF AN
 ; TITLE OF INVENTION: IMMUNE RESPONSE THERETO
 ; FILE REFERENCE: 5986/1K434US1
 ; CURRENT APPLICATION NUMBER: US/10/301,488A
 ; CURRENT FILING DATE: 2002-11-21
 ; PRIOR APPLICATION NUMBER: US 60/331,801
 ; PRIOR FILING DATE: 2001-11-21
 ; NUMBER OF SEQ ID NOS: 55
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 33
 ; LENGTH: 264
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: synthetic
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (132)..(133)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (139)..(141)
 ; OTHER INFORMATION: Amino acid residues 132, 133, 139, 140, and 141 are Val, Val, Tyr
 ; OTHER INFORMATION: Met, and Leu, respectively, in which one to five of residues 132,
 ; OTHER INFORMATION: 133, 139, 140, and 141 is substituted with Pro, Asp, Glu, Lys,
 ; OTHER INFORMATION: Gly, or Ser.
 ; US-10-301-488A-33

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4, 1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNTVTKGHTVTTTGGNFTEIDI 40
 DB 175 RPVDQYSONNFVHDCVNTVTKGHTVTTTGGNFTEIDI 214

RESULT 15

US-10-410-907A-13
 ; Sequence 13, Application US/10410907A
 ; Publication No. US20030215880A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Dennis R. Burton
 ; APPLICANT: R. Anthony Williamson
 ; APPLICANT: Gianluca Moroncini
 ; TITLE OF INVENTION: MOTIF-GRAFTED HYBRID POLYPEPTIDES AND
 ; TITLE OF INVENTION: USES THEREOF
 ; FILE REFERENCE: 22908-1229
 ; CURRENT APPLICATION NUMBER: US/10/410,907A
 ; CURRENT FILING DATE: 2003-04-08
 ; PRIOR APPLICATION NUMBER: 60/371,610
 ; PRIOR FILING DATE: 2002-04-09
 ; NUMBER OF SEQ ID NOS: 36
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 13

LENGTH: 264
 TYPE: PRT
 ORGANISM: Bos taurus (bovine)
 US-10-410-907A-13

Query Match 100.0%; Score 217; DB 14; Length 264;
 Best Local Similarity 100.0%; Pred. No. 4, 1e-20;
 Matches 40; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 RPVDQYSONNFVHDCVNTVTKGHTVTTTGGNFTEIDI 40
 DB 175 RPVDQYSONNFVHDCVNTVTKGHTVTTTGGNFTEIDI 214

Search completed: December 3, 2004, 01:07:48
 Job time: 47.3443 secs

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